Digitized by the Internet Archive
in 2012 with funding from
LYRASIS Members and Sloan Foundation

http://archive.org/details/sugarbulletin19969amer

he Sugar Bulletin
06 E. Bayou Rd.
hibodaux, La. 70301

Address Correction Requested)

BULK RATE
U.S. POSTAGE
PAID
PERMIT NO. 43
Thibodaux, La.

SERIALS DEPT.
LOUISIANA STATE UNIV.
LIBRARY
BATON ROUGE LA 70803

The Sugar Bulletin

OFFICIAL BULLETIN OF THE AMERICAN SUGAR CANE LEAGUE OF THE U.S.A.

Up Front With The League by P. J. deGravelles, Jr. 4
Washington Update With Don Wallace 5
A Look Back In Time 8
Farm Notes by Dr. Charley Richard 9
Sugarcane Variety Outfield Experiments In Louisiana During 1989 by D. D. Garrison, K. L. Quebedeaux, Waguespack and W. R. Jackson 11
The Louisiana Sugarcane Variety Census for 1989 15
More on Mechanical Planters by Herman Waguespack, Jr. and Windell Jackson 17
The Baton Rouge Line by Tom and Linda Spradley 18
In The Factory by Stephen J. Clarke 20

We stand for the encouragement of Home Industries as against Foreign Competition

Vol. 69 — No. 1 OCTOBER 1, 1990

The Sugar Bulletin

The Official Organ of the American Sugar Cane League of the U.S.A., Inc.

P. J. deGravelles, Jr., Editor and General Manager
Charles A. Richard, Ph.D., Director of Research and Field Representative
Windell R. Jackson, Senior Agronomist
Herman Waguespack, Jr., Agronomist
John Constant, Business Manager
Nannette B. Nickens, Office Secretary

Washington Representative:
Wallace and Edwards, Inc.
1150 Connecticut Avenue, N.W.
Suite 507
Washington, D.C. 20036
Phone: (202) 331-4331

Baton Rouge Representative:
Spradley and Spradley
6216 Riverbend Boulevard
Baton Rouge, LA 70820
Phone: (504) 766-1359

Editorial and Executive Office:
206 E. Bayou Rd., Thibodaux, LA. 70301
Phone: (504) 448-3707

OFFICERS AND MEMBERS OF THE BOARD OF DIRECTORS OF THE AMERICAN SUGAR CANE LEAGUE

William S. Patout, III, Jeanerette, LA
President
Dr. Daniel Viator, Youngsville, LA
1st Vice-President
P. J. "Pete" deGravelles, Franklin, LA
Vice President — General Manager
Don Wallace, Washington, DC
Vice President — Government Relations
Patrick Cancienne, Belle Rose, LA
Treasurer
Irving Legendre, Jr., Thibodaux, LA
Secretary

Pat Accardo, Franklin, LA
Bryan Allain, Jeanerette, LA
J. G. Beaud, Jr., New Roads, LA
Bert Beyt, Jeanerette, LA
Ramon E. Billeaud, New Orleans, LA
Felix Blanchard, New Iberia, LA
Ronald Blanchard, Napoleonville, LA
Neal Bolton, St. James, LA
Joseph E. Boudreaux, Thibodaux, LA
Fred Y. Clark, Franklin, LA
Lawrence Dugas, New Iberia, LA
Dan Duplantis, Raceland, LA
Paul Ellender, Bourg, LA
John F. Gay, Plaquemine, LA
Ronald Gonsoulin, New Iberia, LA
Mike Graugnard, Edgard, LA
Warren Harang, III, Donaldsonville, LA
Roddy Hulett, St. Martinville, LA
Bobby Judice, Franklin, LA
Kenneth Kahao, Port Allen, LA
Denis Lanaux, Killona, LA
Melvin Landry, New Iberia, LA
D. C. Mattingly, Paincourtville, LA
Jerry McKee, Thibodaux, LA
Kenneth Peltier, Thibodaux, LA
R. L. Roane, Jr., Jeanerette, LA
Howard Robichaux, Labadieville, LA
Raphael Rodriguez, Franklin, LA
Mel Schudmak, White Castle, LA
Frank Sotile, Donaldsonville, LA
David Stewart, Lakeland, LA
Roland Talbot, Thibodaux, LA
Jackie Theriot, Breaux Bridge, LA
James Thibaut, Donaldsonville, LA
Glenn Timmons, Brusly, LA
Eugene Woods, Paincourtville, LA

HONORARY MEMBERS

Joseph G. Beaud, Sr., New Roads, LA
Charles Billeaud, Broussard, LA
Paul G. Borron, Jr., Plaquemine, LA
Jerry L. Dickson, New Orleans, LA
Gilbert J. Durbin, New Orleans, LA
F. Evans Farwell, New Orleans, LA
J. N. Foret, Jr., Mathews, La.
Andrew Gay, Plaquemine, LA
F. A. Graugnard, St. James, LA
Warren J. Harang, Jr., Thibodaux, LA
Lloyd Lauden, New Orleans, LA
E. W. McNeil, Brusly, LA
J. Randolph Roane, Jeanerette, LA
Charles C. Savoie, Belle Rose, LA
Edward T. Supple, Bayou Goula, LA
E. Berkshire Terrill, Brusly, LA
John Thibaut, Napoleonville, LA
M. V. Yarbrough, Fort Smith, Ark.

POSTMASTER: Send address changes to THE SUGAR BULLETIN, 206 E. BAYOU RD., THIBODAUX, LA. 70301.

MAXXUM™

One of the most durable parts on a MAXXUM tractor is made of paper.

Everything on the new Case International MAXXUM tractors is designed to last, including the 5-year, 5,000-hour warranty on the *entire* tractor.* That's the best warranty in the business, by far.

It just goes to show how much Case International believes in the durability and reliability of MAXXUM tractors.

What makes the MAXXUM tractor so durable? It comes equipped with one of three proven Case International diesel engines. They're durable, dependable and guaranteed to deliver both high torque rise and high fuel economy. You can feel confident knowing that more than 250,000 similar engines are in use around the world. Count on them to perform — trouble-free — for thousands and thousands of hours.

Come in to see the Case International line of MAXXUM tractors today.

* Excluding tires, which are covered by their own manufacturer's warranties. A $200 deductible applies to each repair after the first year.

[a]JI Case Company 1989

Switzer Sales and Service
Jeanerette, LA
(318) 276-6384

Gremillion's, Inc.
New Roads, LA
(504) 638-6347

Lanier Int's. Inc.
Abbeville, LA
(318) 893-1988

Lemann's Farm Supply Inc.
Thibodaux, LA
(504) 447-3776

Baton Rouge, LA
(504) 357-6453

Donaldsonville, LA
(504)473-7927

case ih

UP FRONT WITH THE LEAGUE

By P. J. deGravelles, Jr.

Within a month or so, Louisiana sugar factories will commence operations for the 1990 sugar cane harvest.

Crop year 1990 will be recorded in history as one of the most difficult years for the Louisiana sugar industry. Beginning in late December of 1989 with a record breaking freeze that saw temperatures plummeting to the single digits, the freeze persisted for over 60 successive hours. Before the sugar cane crop could recover from the freeze, we experienced one of the wettest springs on record. The excessive rains only added insult to injury as far as recovering stands of cane were concerned. When the smoke finally cleared, we saw Louisiana's sugar cane acreage drop from a predicted 326,000 acres to approximately 230,000 acres. Because of the larger amount of cane being planted this fall, more acres than usual will be used for seed cane. The bottom line for all of this is that the acreage harvested for sugar in 1990 will be the smallest amount since sometime during the 1920's.

However, despite all of the "gloom & doom," Louisiana sugar cane growers are proceeding with fall planting and intentions are to plant in addition to the normal acreage, the extra fallow land that resulted from the plow out of freeze damaged sugarcane. If all goes well, Louisiana growers will fall plant about 100,000 acres of cane in 1990. This should result in an extremely good crop in 1991.

FREE CALL
1-800-738-2263
Save Big Money On Parts
New, Used, Rebuilt Parts for I-H, John Deere, Oliver and A.C. We ship nationwide & can find parts for any Tractor, Big Truck & Construction Equipment. Parts for any make Tractor
Hi-Crop and Row Crop Tractors.
Consider Used or Rebuilt Parts or Engines.
CANE TRACTOR PARTS
Route 1, Box 319-T
Jeanerette, LA 70544
(318) 276-3453

Ken Squires
Pilot

PENN-TEX
Helicopters, Inc.
"Precision Chemical Control"
318-278-2174 318-728-4272

SUGAR BULLETIN
WANT ADS
GET RESULTS

WASHINGTON UPDATE WITH DON WALLACE

SENATE AND HOUSE PASS 1990 FARM BILL

President Bush signed a proclamation September 14 authorizing a tariff-rate quota on sugar imports effective October 1, 1990. The new tariff-rate quota will replace the current import quota system which a panel of the General Agreements on Tariffs and Trade (GATT) found not to be in compliance with international trade rules. Under a tariff-rate quota system, a set amount of sugar can come into the country under a nominal tariff, but quantities of sugar above that amount would be subject to a 16 cents per pound tariff. Therefore, there is no limit to the amount of sugar that may be imported at any time, but quantities above the individual exporter's allocation will be subject to the 16 cent per pound tariff.

U.S. Trade Representative Carla Hills said the 16 cent tariff on excess sugar imports will maintain the integrity of the domestic no-cost program. However, it is the general feeling in the domestic industry that this may be true only if world sugar prices remain above six cents a pound. Currently, the world price is in the 11-12 cent range, but the volatile world sugar "dump" market has been below six cents about one third of the time since January 1985.

If world sugar prices fall dramatically, the President currently has the authority to proclaim a higher tariff level, as long as the tariff remains unbound and flexible. However, U.S. GATT negotiators could agree to bind the tariff which would mean the government would not have the flexibility to ensure the no-cost provision of the law. The negotiators could also agree to reduce the tariff level over a period of time.

Another area of concern is imports from Canada. Due to the U.S.-Canada Free Trade Agreement, imports from that country are exempt from the tariff rate quota. However, the Administration has indicated that if future imports from Canada should rise above historical levels, they will use other means to limit sugar shipments.

USDA ANNOUNCES INCREASE IN SUGAR IMPORT QUOTA

In a related announcement on September 14, Secretary of Agriculture Clayton Yeutter said U.S. sugar imports permitted at the lower duty level under the new tariff rate quota system (see above story) in the 1990/91 period will be 1,725,000 metric tons (about 1,901,488 short tons), raw value, an increase of 6.5 percent compared to 1989/90. The quota period is October 1, 1990 to September 30, 1991.

Total authorized shipments is the sum of specialty sugar imports of 1,615 metric tons, raw value (about 2,000 short tons), the minimum boatload total allocation of 72,580 metric tons (about 80,000 short tons), an adjustment amount of 4,877 metric tons, raw value (about 5,376 short tons) and base imports of 1,659,000 metric tons (about 1,828,736 short tons).

This is the third consecutive year the sugar import quota has been increased, although the Secretary of Agriculture and others had predicted that the United States would be a net exporter of sugar by 1991. The quota increases are the result of a return to lower, and more normal, production levels and five consecutive years of rising U.S. sugar consumption. Domestic sugar prices have also been stable.

(Continued on page 6)

WASHINGTON UPDATE

(Continued from page 5)

During the entire decade of the 1980s, the raw sugar price rose just 7.9 percent and retail refined sugar prices rose only 6.1 percent. The general rate of inflation during that period was more than 50 percent.

In a companion announcement, U.S. Trade Representative Carla Hills announced the 1990/91 country-by-country allocations.

ADMINISTRATION REVIEWING SUGAR MSP

Reports have been circulating that the Administration is reviewing the method by which it calculates the sugar Market Stabilization Price (MSP) with a view toward reducing it by as much as one cent. The MSP is calculated by adding to the national average loan rate: (1) transportation costs from Hawaii to the East Coast; (2) loan interest charges; and, (3) a marketing incentive. In fiscal 1989/90 the loan rate was 18 cents per pound; transportation, 3.04 cents; interest, 0.71 cents; and incentive, 0.20 cents — for an MSP of 21.95 cents.

Both Senators Bennett Johnston (D-LA) and John Breaux (D-LA) contacted Agriculture Secretary Clayton Yeutter strongly expressing their opposition to lowering the MSP saying that it has been working extremely well and does not need adjustment at this time. During the 7 years to date (1982/83-88/89), the raw sugar market price (21.61 cents/lb.) has averaged only 0.14 cents above the MSP (21.47 cents). Domestic raw sugar prices have also been stable, increasing only 3.2% from 1982/83 to 1988/89.

The MSP for 1990/91 will be announced by the beginning of the new fiscal year, October 1.

SENATE FARM BILL CONFEREES APPOINTED

Senate conferees have been appointed to serve on a conference committee which is expected to begin soon working out the differences in the House and Senate versions of the 1990 Farm Bill. Senate conferees will be Agriculture Committee Chairman Leahy (D-VT), ranking minority member Senator Lugar (R-IN), and Senators Pryor (D-AR), Boren (D-OK), Kerrey (D-NE), Dole (R-KS) and Cochran (R-MS).

At press time, House conferees had not yet been named, but it is expected that conferees will include Agriculture Committee Chairman de la Garza (D-TX), ranking minority member Madigan (R-IL) as well as the chairmen and ranking minority members of each of the subcommittees.

YEUTTER BLASTS HOUSE AND SENATE FARM BILLS

In a speech September 14, Agriculture Secretary Clayton Yeutter blasted both the House and Senate versions of the 1990 Farm Bill saying both bills would price farmers out of world markets. Yeutter pointed out a number of provisions in the bills which the administration strongly opposes including sugar supports. Presently, both bills would spend approximately $54 billion, and Yeutter said that to achieve further reductions in farm spending, Congress would have to reduce target prices and subsidy payments to farmers.

Specifically on sugar, Yeutter said the burden of paying for the sugar program has been entirely on the consumer because present legislation calls for the

(Continued on page 21)

At last. A truly NEW Loader that makes a difference. the Tiger from LA CANE

Feature for feature the Tiger Series offers benefits unmatched in any other loader.

180° Swing Loaders • 3 and 4 wheel drive • 2000 Lb. Grab Capacity Elevator Piler • Straddles 2 Rows. *Plus . . .*

Spacious, quiet cab-air conditioned
Excellent vision — high, low, all around
Extremely comfortable Reclining Seat Fully Adjustable
Excellent positioning of all Loader Controls and Guages
Perfect feel of all Loader functions (fine metering control)
Superior cylinder and propulsion speeds
Excellent swing cushions with quick return
Quick release / tight closing Grab
4 speed hydrostatic transmission
No flexing to get in and out of pilers
and more

A Product of Louisiana Cane Manufacturing, Inc.

Building on a tradition — serving a proud industry.
P.O. Box 71 Thibodaux, La. 70302, USA Phone 504-447-8404

A LOOK BACK IN TIME

This article was printed in the September 15, 1951 issue of The Sugar Bulletin.

GILBERT J. DURBIN APPOINTED GENERAL MANAGER OF THE AMERICAN SUGAR CANE LEAGUE

On October 1st, 1951, Mr. Gilbert J. Durbin will become the General Manager of the American Sugar Cane League of the U.S.A., Inc. Mr. Durbin was selected to fill this high position by the Executive Committee of the League when that body met in special session in New Orleans on August 22nd, 1951.

Mr. Durbin was unanimously recommended as the man most suited for the exacting task of guiding the destinies of the League by a Special Committee that was appointed in January to look into the reorganization of the New Orleans and Washington offices. He succeeds Mr. Marcel J. Voorhies, who has been relieved at his own request, because of failing health.

Mr. Gilbert Joseph Durbin was born in Gilliam, Louisiana, on January 6, 1914. In 1931 he graduated from high school, at Belcher, Louisiana and in June 1935 received a Bachelor of Science degree in Agriculture from Louisiana State University and Agricultural and Mechanical College.

He was selected as the Outstanding Senior in the L.S.U. College of Agriculture in 1935.

From September 1935 to February 1945, he served in various positions with the Agricultural Adjustment Administration and the Agricultural Adjustment Agency, including the position of state administrative officer in Louisiana and chief of the marketing quota section of the AAA Southern Region Office in Washington, D.C.

In 1945 and 1946 he assisted his partner in managing two retail feed and seed stores owned by the partnership in Monroe and West Monroe, Louisiana. He served as Associate Agronomist in 1947 and Radio Editor in 1948 for the Louisiana Agricultural Extension Service.

He was fieldman in Southwest Louisiana for the Production and Marketing Administration in 1949, and in January 1950 was appointed state executive officer for the PMA in Louisiana, a position he has held since that date.

Among the programs administered by the PMA are the Sugar Program, Agricultural Conservation Program, price supports, and crop insurance.

Mr. Durbin received a Master of Science degree in Agricultural Economics from Louisiana State University in August 1951.

Mr. Durbin is married and has two daughters, Elaine age nine and Doris age seven. Mrs. Durbin is the former Rachel Wallice O'Quin of Alexandria, La.

Liquid Fertilizers For Sugar Cane

NEW IBERIA, LA. (318) 367-8233

FARM NOTES By Dr. Charley Richard

HARVESTING SHORT CANE — POOR GROWING CONDITIONS/POOR CROP

In my last article I suggested that growers consider some method to help reduce the effect of the grass in the many acres of short, gappy cane that will certainly be hurt at the core sampler because of the extraordinary amount of weeds present. I originally wrote the article incorrectly and as the label pasted over the end of the article indicated, Paraquat is not currently labeled for use in Louisiana as a harvest aid. It does have a label for another specific use in Louisiana but not as a harvest aid. The original idea of attempting to find an inexpensive way to reduce the amount of fiber in the core samples as a result of the grass is still what growers should try to accomplish. However, the alternatives at this time are few. There is an attempt to get a temporary label for Paraquat for this year only to use in the short, grassy cane. However, Paraquat drift can be a real problem and the chemical is more dangerous than most of the other herbicides we are currently using. At this time, since Polado is the only material legally available, growers should consider what Polado does to cane growth and the amount of time required for Polado to accomplish its ripening effects as well as its burn down of the grass. On very short cane this may determine whether Polado can be used or not since cane stalks shorter than the carrier system on the harvester may not grow very much after the application of the Polado. Late in October, which is the time period in question, short cane may not grow very much even without Polado applications. One alternative some are considering is to allow harvested cane to lay on the heap for an extra day before burning. If the weather is cool and dry then this should allow the leafy material to dry up and get a better burn while the cool weather should not allow for a buildup in dextran level. However, growers should remember that each day that cane sits on the ground it does dry out and loses stalk weight. If it is wet when this cane is harvested then it really doesn't matter what has been done because there will be little way to reduce the amount of grass before it can be loaded for delivery. Whatever growers decide to do with the very short, gappy cane, it will have to be a well thought out management decision based upon what is best for those particular conditions.

There are other factors that growers should consider in harvesting this short cane which may help them do a better job. First of all, growers may want to consider keeping the shorter cane for later harvest to allow for the maximum potential of growth and frosts to help dry up leaves and grass. Growers should consider which harvester to use to cut this cane. Two row harvester carrier systems are generally higher off the ground than single row harvesters. Two row heaps would reduce scrap by not having to cross stalks over additional rows. Tire height affects the height of the carrier system from the top of the row. Cutting cane in the mud will lower the carriage system a couple of inches as the harvester tires cut ruts in the middles. Butchering this short, gappy cane will have less effect on overall yields since there is less to lose and this cane will not be kept for harvest next year.

Cane stalks shorter than five feet generally fall down lower than the tops of the rows as they are placed across the heap after harvesting. This makes the

(Continued on page 10)

 (Continued from page 9)

loading operation much more difficult especially for mechanical pilers as they try to lift these short stalks from the ground. Gappy cane usually does not cut well and stalks often wind up diagonally across the heap rather than straight across the row. Harvester and loader operators should be reminded of these problems and they should concentrate on doing the best job possible. Growers should anticipate more scrap in the short, gappy cane and determine whether scrappers would be worth the money in these low yielding fields.

Because of the extra amount of tops and the inacuracy in topping short, inconsistent cane, growers should not expect the cane to have a high CRS level. If difficulty is experienced in picking up the short cane and if there is any appreciable amount of grass and/or mud in the heap, a further reduction in CRS can be expected.

POOR GROWING CONDITIONS LEAD TO POOR CROP

This year's growing conditions have been about as bad for cane growth as anyone can remember. After the devasting freeze of December, 1989, January through March produced considerably more rain than normal throughout the cane belt (some 45% more than normal). We all realize the wet, cool weather was a major factor in cane stands being as bad as they are this year. Following the wet spring, a dry summer was experienced which caused even greater reductions in yield potential since adequate moisture for optimum cane growth was not available. The remainder of the year is, of course, still in question; but at this time, mid-September, the crop prospects are dismal. Of our expected 320,000 acres for harvest in 1990, there will only be some 185,000 acres harvested for sugar. Yields averaged over 27 gross tons per acre during the last three years. In 1990 many growers will consider 23 tons per acre to be an ideal crop following the adverse conditions experienced so far this year. With the expectations of poor sugar recoveries as described in earlier paragraphs, the current predictions for sugar production in 1990 are less than 350,000 tons of sugar after having produced a Louisiana record of over 850,000 tons of sugar in 1989.

CLASSIFIED

FOR SALE: 230-21' Flat Chopper John Deere — $3,200.00. Steiger Bearcat II #3416-1974, 4 wheel drive — $10,000.00. D17 Hi-Boy Spray Rig 1973 — $4,000.00. 1965 American Grain Trailer #14285 — $4,000.00. 1989 V-Ditcher — new — $2,000.00. 2 - 1,000 NH3 tanks on wheels. 2 — Fertilizer applicators with dry box. Call C & C Martin Farms at (318) 828-0904 after 6 p.m.

FOR SALE: Ramy transloader mounted on International Truck. Call Donald at (504) 369-7269.

FOR SALE: 2 Thompson drum planters used for 1990 planting. Call (318) 364-8903 or (318) 365-5036.

Sugarcane Variety Outfield Experiments in Louisiana During 1989

D. D. Garrison[1], K. L. Quebedeaux[2], H. L. Waguespack[3], and W. R. Jackson[3]

INTRODUCTION

The outfield testing program, a cooperative effort of the United States Department of Agriculture, Agricultural Research Service, Sugarcane Research Unit, Houma, LA, Louisiana State University Agricultural Center, Sugar Station, Baton Rouge, LA, and the American Sugar Cane League of the U.S.A., Thibodaux, LA, is the final stage in evaluating candidate sugarcane varieties for release to the Louisiana sugarcane industry. In 1989, a total of eight candidate varieties in plant cane, six in first-stubble and three in second-stubble tests were compared with five commercial varieties (CP 65-357, CP 70-321, CP 74-383, CP 79-318 and CP 72-370 or CP 76-331) on representative soil types at 14 locations throughout the cane belt.

Seasonal Conditions

Below average rainfall and above average temperatures occurred during January, February, and early March which, undoubtedly, contributed to good early stands of cane; however, temperatures in mid-March in the mid- to upper 20's killed this early growth (4). Cane height remained below normal in April and above average rainfall during May and June generally suppressed tillering. Tropical storms 'Allison' and 'Chantel' and their associated rains contributed to average stands and growth during late August and early September. These wet summer months were followed by below average rainfall in the fall. A cold front during the third week of October brought unseasonable cold temperatures to the cane belt; however, the crop suffered no ill effects and the cool weather appeared to enhance maturity. During the second and third week of November heavy rains fell throughout much of the cane belt and contributed to extensive lodging. Although this rain created poor harvest conditions, it provided much needed moisture for late planted cane. The coldest weather of this century occurred from December 21 to 25 in the cane belt. Low temperatures of 8-10°F were recorded with freezing temperatures remaining for over 60 hours; however, harvest was near completion and little standing cane was lost to the freeze.

Experimental Procedures

Outfield variety tests were hand planted in randomized, complete-blocks with three replications. Plots were 32 feet long and 18 feet (3 rows) wide, with a 5-foot pathway separating plots. Practices recommended for commercial production and harvesting of sugarcane in Louisiana were used at all test sites (2).

(Continued on page 12)

---

[1] Agronomist, USDA-Agricultural Research Service, Sugarcane Research Unit, Houma, La. 70361.

[2] Research Associate, Louisiana State University Agricultural Center, Sugar Station, Baton Rouge, La. 70803.

[3] Agronomist, American Sugar Cane League of the U.S.A., Thibodaux, La.

Sugarcane Variety Outfield Experiments

(Continued from page 11)

At harvest, field notes on harvestability were recorded. Variety plots were weighed to determine gross yield of cane per acre. Net yields were calculated by multiplying gross yields of each variety by a constant trash correction factor of 0.86. Fifteen stalks were randomly selected from each plot, weighed and passed once through a three roller mill. Juice samples (crusher juice) were analyzed for Brix and apparent sucrose. The yield of theoretical recoverable sugar per ton of cane (TRS) was calculated based on brix and sucrose of crusher juice and a previously determined milling factor (3). Mean stalk weight was calculated from sample weights. Sugar per acre was calculated from net tons of cane per acre and TRS. The number of millable stalks per acre was calculated by dividing yield of net tons of cane per acre by the mean stalk weight derived from the 15-stalk sample. Significant differences were determined by using Waller-Duncan's Bayesian k-ratio t-test (k-ratio-100:1, roughly corresponding to P-0.05).

Results

Table 1 lists outfield test locations by soil type and crop. Dates of planting and dates of harvest are presented for each location.

The combined analyses of the yield data from all locations are reported in Tables 2 through 7, and are grouped by soil type and crop. Varieties are listed in descending order by yield of sugar per acre. In the comparison of the yield results, CP 70-321 which is planted on 41% of the State's acreage (1), is used as the standard variety and is underlined in each table.

Light Textured Soil Results

Plant-cane crop: In yield of sugar per acre, CP 84-730, CP 76-331, CP 79-318, CP 83-644, and LCP 82-89 were significantly higher than CP 70-321 (Table 2).

In tons of cane per acre, CP 76-331, CP 79-318, and CP 74-383 were significantly higher than CP 70-321.

In TRS, CP 84-730, CP 76-331, CP 79-318, CP 83-644, LCP 82-89, CP 82-550, CP 82-551, CP 65-357, and CP 83-625 were significantly higher than CP 70-321 while CP 74-383 and L 84-290 were significantly lower.

In stalk weight, CP 84-730, CP 76-331, and CP 83-644 were significantly higher than CP 70-321 while LCP 83-153, CP 82-550, CP 82-551, CP 74-383, CP 83-625, and L 84-290 were significantly lower.

In stalk population, LCP 83-153, CP 82-550, CP 82-551, CP 74-383, CP 83-625, and L 84-290 were significantly higher than CP 70-321.

First-Stubble crop: In yield of sugar per acre, CP 76-331, CP 79-318, LCP 82-89, and LCP 83-153 were significantly higher than CP 70-321 (Table 3).

In yield of tons of cane per acre again, CP 76-331, CP 79-318, LCP 82-89, LCP 83-153 and CP 74-383 were significantly higher than CP 70-321, and CP 82-550 was significantly lower.

In TRS, CP 76-331, CP 79-318, LCP 82-89, CP 82-550, CP 83-625, and CP 83-644 were significantly higher than CP 70-321 while CP 74-383 was significantly lower.

In stalk weight CP 76-331, CP 79-318, CP 83-644, CP 74-383, and CP 65-357 were significantly higher than

(Continued on page 13)

Sugarcane Variety Outfield Experiments

(Continued from page 12)

CP 70-321 while CP 83-625 and CP 82-550 were significantly lower.

In stalk population LCP 82-89 and CP 83-625 were significantly higher than CP 70-321 while CP 83-644 and CP 65-357 were significantly lower.

Second-stubble crop: In yield of sugar per acre, CP 76-331, CP 79-318, LCP 82-89, and CP 82-551 were significantly higher than CP 70-321 (Table 4).

In yield of tons of cane per acre CP 74-383, CP 76-331, CP 79-318, LCP 82-89, and CP 82-551 were significantly higher than CP 70-321 while CP 65-357 was significantly lower.

In TRS, CP 76-331, CP 79-318, and CP 82-550 were significantly higher than CP 70-321 while CP 74-383 was significantly lower.

In stalk weight CP 65-357 was significantly higher than CP 70-321 while LCP 82-89 and CP 82-550 were significantly lower.

In stalk population, CP 76-331, CP 79-318, LCP 82-89, CP 82-550, and CP 82-551 were significantly higher than CP 70-321 while CP 65-357 was significantly lower.

Heavy Textured Soil Results

Plant-cane crop: In yield of sugar per acre, no variety was significantly different than CP 70-321 (Table 5).

In yield of tons of cane per acre, no variety was significantly higher than CP 70-321. Two varieties, CP 82-550 and CP 83-625 were significantly lower than CP 70-321.

In TRS, CP 79-318, CP 82-550, CP 83-625, CP 83-644 and CP 84-730 were significantly higher and no variety was significantly lower than CP 70-321.

In stalk weight, CP 84-730 was significantly higher and CP 82-550, CP 83-625 and L 84-290 were significantly lower than CP 70-321.

First-stubble crop: In yield of sugar per acre and tons of cane per acre, no variety was significantly different from CP 70-321 (Table 6).

In TRS, CP 76-331, CP 79-318, CP 82-550, CP 83-625 and CP 83-644 were significantly higher than CP 70-321. CP 74-383 was significantly lower than CP 70-321.

In stalk weight, no variety was significantly higher than CP 70-321. Four varieties, CP 74-383, CP 82-550, LCP 83-153 and CP 83-625 were significantly lower than CP 70-321.

In stalk population, there were no significant differences between varieties.

Second-stubble crop: In yield of sugar per acre, LCP 82-89 was significantly higher and CP 65-357 was significantly lower than CP 70-321 (Table 7).

In yield of tons of cane per acre, LCP 82-89 was significantly higher than CP 70-321. No variety was significantly lower.

In TRS and stalk weight, there were no significant differences between varieties.

In stalk population, CP 74-383 and LCP 82-89 were significantly higher than CP 70-321. No variety was significantly lower.

Discussion

Unreleased Varieties: Yield data were obtained for the following three

(Continued on page 14)

Sugarcane Variety Outfield Experiments

(Continued from page 13)

crops: in the plant cane crop for L 84-290, CP 84-730, LCP 83-153, CP 83-625, CP 83-644, LCP 82-89, CP 82-550 and CP 82-551; in the first-stubble crop for LCP 83-153, CP 83-625, CP 83-644, LCP 82-89, CP 82-550 and CP 82-551; and, in the second-stubble crop for LCP 82-89, CP 82-550 and CP 82-551. In the plant cane crop, CP 84-730, LCP 83-644 and LCP 82-89 were significantly higher in sugar per acre than CP 70-321 while no unreleased variety was significantly lower than CP 70-321 in sugar per acre on light textured soils. On heavy textured soils, there were no significant differences in sugar per acre.

In first-stubble tests on light textured soil, LCP 83-153 and LCP 82-89 were significantly higher than CP 70-321 in sugar per acre. On heavy textured soils there were no significant differences.

In second stubble test on light textured soil, LCP 82-89 and CP 82-551 yielded significantly more sugar per acre and tons per acre than CP 70-321. LCP 82-89 also yielded significantly more sugar per acre and tons per acre than CP 70-321 on heavy textured soils in the second-stubble crop.

Commercial Varieties: In the plant cane crop CP 76-331 and CP 79-318 yielded significantly more sugar per acre, tons per acre, and TRS than CP 70-321 on light textured soils. On heavy textured soils in the plant cane crop there were no significant differences between commercial varieties and CP 70-321 in sugar per acre and tons of cane per acre. CP 79-318 was the only commercial variety that was significantly higher than CP 70-321 in TRS in the plant cane crop on heavy textured soils.

In both the first- and second-stubble crops on light textured soils, CP 76-331 and CP 79-318 were both significantly higher than CP 70-321 in sugar per acre while on heavy textured soils CP 65-357 was significantly lower in the second stubble crop.

Acknowledgments

The authors would like to express their appreciation to the outfield location cooperators and their personnel for assistance in planting and harvesting outfield tests in 1989.

References

1. Garrison, D. D. and D. Landry. 1990. The sugarcane variety census for the 1989 Louisiana crop. Sugar Bull. (In Press)
2. Jackson, W. R., H. L. Waguespack, D. D. Garrison, and D. Lester. 1989. Sugarcane Variety Outfield Experiments in Louisiana during 1988. Sugar Bull. 67(17):12-13, 18-23.
3. Legendre, B. L. and M. T. Henderson. 1972. History and development of sugar yield calculations. Proc. ASSCT 2(NS):10-18.
4. Louisiana Monthly Climate Review, Office of State Climatology and Anthropology, Louisiana State University. 1989. Vol. 9, No. 1-12.

(See Table 1, page 22)

Louisiana sugarcane variety census for 1989

Donnie D. Garrison

Sugarcane Research Unit, Agricultural Research Service,
U.S. Department of Agriculture
Houma, Louisiana 70361

The annual sugarcane variety census is conducted cooperatively by the Louisiana Cooperative Extension Service and the Agricultural Research Service of the U.S. Department of Agriculture. The census generally represents grower preference for varieties. Varieties grown in Louisiana are released through a Cooperative Agreement between the American Sugar Cane League of the USA, Inc., Louisiana State University Agriculture Experimental Station of the Louisiana State University Agricultural Center, and the Agricultural Research Service, U.S. Department of Agriculture. Varieties selected at Houma with commercial potential are assigned CP (Canal Point) numbers though the cross was made at Canal Point, FL or Houma, LA. On request, seed or seedlings from both Canal Point or Houma are sent to the Experiment Station at Louisiana State University (St. Gabriel) and selected varieties are assigned LCP (Louisiana/Canal Point) numbers. Varieties selected from seed produced by the Louisiana Agricultural Experiment Station are assigned simply L (Louisiana) numbers.

In Louisiana, sugarcane acreage for seed and milling in 1989 was approximately 320,000 acres (129,555 hectares) (2) grown in 17 parishes. For reporting purposes, the sugarcane growing area of Louisiana is divided into three geographic regions: the southwestern region with 44 percent of the state acreage and includes the parishes of Iberia, Lafayette, St. Mary, St. Martin and Vermillion; the southeastern region with 39 percent of the state acreage and includes the parishes of Ascension, Assumption, Lafourche, St. Charles, St. James, St. John and Terrebonne; and, the northern region with 17 percent of the state acreage and includes the parishes of Avoyelles, Iberville, Point Coupee, Rapides and West Baton Rouge.

TOTAL AREA

Eight varieties, each occupying at least 1 percent of the acreage, were grown in Louisiana during 1989 (Table 1). The six most widely grown varieties and their state acreage were as follows: CP 70-321, 41%; CP 65-357, 28%; CP 72-370, 10%; CP 74-383, 8%; CP 72-356, 4%; and, CP 76-331, 5% (1). All other varieties were each grown on less than 4% of the state's total acreage.

REGIONAL

Southwestern Region

CP 70-321 was the major variety grown in the southwestern region, occupying 57% of the area followed by CP 65-357 with 25% of the region (Table 1). The varieties CP 72-370 and CP 74-383 were reported on 7 and 4% of the acreage, respectively. The remaining four varieties were each grown on less than 4% of the region.

Southeastern Region

CP 65-357 was the major variety in the southeastern region, occupying 37%

(Continued on page 16)

Louisiana sugarcane variety census

(Continued from page 15)

of the area. The second most popular variety in this region was CP 70-321, with 20% of the acreage. CP 72-370 occupied 15% of the acreage while CP 74-383 occupied 10% of the acreage. No other variety was planted on over 6% of the region.

Northern Region

CP 70-321 was again the major variety in the northern region, occupying 49% of the region. CP 65-357 and CP 74-383 were each reported on 15% of the acreage. The remaining five varieties accounted for only 21% of the region.

Variety Trends

Generally a new variety reaches peak acreage after 5-6 years. Its acreage remains stable for another 2 or 3 years afterwhich the variety tends to decrease in acreage. After several more years it may occupy only token acreage. The variety CP 65-357 is an exception in that its acreage decreased after a peak in 1980, but then increased again from 1987 to 1989 (Table 2). Acreage of CP 65-357 went from 22% in 1987 to 28% in 1989, reversing the downward trend. It is possible that the acreage of CP 65-357 may even increase further because of the availability of disease-free seed cane, which was first introduced in 1987.

CP 70 321, the leading variety peaked in 1988 with 43% of the acreage and has remained rather constant with 41% in 1989, a decrease of only 2% (Table 2). The poor stubbling variety CP 70-330 and brittle variety CP 72-356 continue to decline in acreage. CP 72-370, with high early sugar, has remained stable over the last six years while occupying approximately 9% of the state acreage. CP 74-383, a good harvesting variety with good tonnage, has decreased in acreage over the past 3 years. Smut and borer susceptibility, coupled with inconsistant plant cane stands, have undoubtedly contributed to its decline.

CP 79-318, released in 1987, was reported on 2 percent of the state acreage. CP 79-318 is an early maturing, good stubbling variety but is brittle and difficult to harvest. The growers ability to harvest this variety will ultimately determine its fate in future years.

Sugar Yields During 1989

The total amount of sugar produced in Louisiana during 1989 was 850,000 tons (2), the largest such production on record. The industry produced 28.3 gross tons of cane per acre with a sugar recovery of 204 pounds of sugar per ton on 294,000 acres of sugarcane that was ground by the State's 21 mills. Varieties adapted to Louisiana and a good growing and harvesting season all contributed to this record production.

Acknowledgments

The authors gratefully acknowledge the assistance of the following County Agents of the Louisiana Cooperative Extension Service who helped obtain survey data: James Abadie (Iberia), Warren Beaugh (Lafayette), Miles Brashier (Pointe Coupee), Larry Brock (St. John), Bill Davis (Ascension), James Devillier (St. Martin), Terril Faul (Vermillion), Lynn Simon (St. Mary), Louis Favaron (Iberville), James Garrett, Jr. (St. James), John Harris (Rapides),

(Continued on page 26)

More on Mechanical Planters

by Herman Waguespack, *Jr. Agronomist*
and Windell Jackson, *Senior Agronomist*

FRONT END PLANTERS

The last two articles on mechanical planters have focused on the improvements made by growers on automating drum type and slat or carrier type planters. This month we will take a look at another type of planter that has gained popularity in the last few years — the front end planter.

The first reaction that most people have when they look at a front end planter is that everything is backwards. The drum is in the front of the wagon and cane is pushed toward the front (in the same direction that the tractor is going) instead of to the back. One might ask why push cane toward the front? Or, how does the cane fall correctly in the row without the planter rolling over the cane? Or a host of other questions all of which are good ones. Those growers who are using this type of planter will readily admit that although this arrangement might seem strange, the fact is, they work. Although these planters have not gained widespread acceptance yet, several growers throughout the belt are using this type of planter successfully.

One such grower, Mr. L.G. (Sonny) Adams from White Castle, La. has planted his crop with mechanical planters for the last 15 years or so. For the last three years he has planted with front end planters. While cultivating about 350 acres of cane he has brought home numerous high yield awards through the years. Although Mr. Adams has recently retired he can still be found in the fields at this time of year. (He says he is consulting.) On a recent visit with Mr. Sonny he gave us a summary of some of the work he has done on his planters.

He started out with a standard mechanical planter and has made several changes throughout the years that have improved his planting operation. He has converted his standard planter into a front end planter and has automated the controls so that the tractor driver controls all operations of the planter. These changes have virtually eliminated seed cane damage at the ends of the row by tractors rolling over the cane dropped from wagons while turning. The driver has only one control to handle which is the PTO lever used to start and stop the planter. Since the tractor operator can see how much cane is being dropped, he can start and stop the planter at any time and can adjust the tractor speed according to the planting conditions. The amount of cane being dropped is controlled by the drum speed which is changed periodically according to the variety of cane being planted, moisture on the cane, seed condition, etc. The flotation of the drum (about 3 inches) controls the hydraulic winch that keeps the seed against the drum at all times.

Another significant improvement Mr. Adams has made has been the addition of floor slats welded onto the gate retrieve chains. He has found that by placing these floor slats 18 inches apart he can get an even flow of cane toward the drum. This has also helped to cut down on seed compaction and sliding of cane when travelling to the field to be planted. Mr. Adams feels that this

(Continued on page 28)

The Baton Rouge Line

By Tom and Linda Spradley

MEET YOUR LEGISLATOR

During the next few months, we will introduce you to your legislators through this column. These representatives have been most attentive to the interests of the sugar industry, and we would like for you to get to know them better.

This month, we begin with Rep. Charlie Melancon and Sen. Mike Foster, who took leadership roles for sugar this past legislative session.

Rep. Charlie Melancon is the state representative for District 60, based in Iberville Parish. Charlie lives and works in Napoleonville, which is where he grew up and attended primary school.

Charlie's interest in the sugarcane business goes way back, since his father managed a sugar co-op. Besides working side-by-side with the American Sugar Cane League this past session, he is on the Board of Directors of the Sugar Cane Festival & Fair Assn.

As a state representative, Charlie is kept busy serving on the Commerce, Judiciary, and Retirement Committees, and on the Joint Committee on Tourism and Joint Commission on Insurance. He is Vice Chairman of the Commerce Subcommittee on Insurance. Recently, he was presented with the Distinguished Service Award by the Louisiana Restaurant Assn. and in 1989 was twice recognized as the Outstanding Legislator by the Louisiana Municipal Assn.

In addition to serving full-time as a state legislator, Charlie is President of Melancon Insurance Agency, Inc., and owns Melancon Rentals. He is a Certified Insurance Counselor (CIC), and a member of the Independent Agents Association of Louisiana and Professional Insurance Agents of Louisiana.

Having graduated with a B.S. in Agricultural Business from the University of Southwestern Louisiana, Charlie has maintained his ties with the University and serves as a member of the Kappa Sigma Alumni Assn. and the USL Alumni Assn.

Although he is kept very busy with his legislative responsibilities, Charlie still finds time to serve as a member of the Assumption Assn. for Retarded Children, Ducks Unlimited, and the Assumption Parish Farm Bureau. Charlie is also an avid hunter and fisherman.

Charlie is married to Alida "Peachy" Clark Melancon, and they have two children, Charles J. Melancon, Jr. and Alida Claire Melancon.

Rep. Mike Foster has a history in public service and the sugar cane business that goes back several generations in his family. His great-grandfather, Levi Foster, served for many years as a State Representative of St. Mary Parish. His grandfather, Murphy J. Foster, was Governor of Louisiana and a United States Senator. Mike's father, also Murphy J. Foster, owned and farmed Maryland Plantation in Franklin and was Vice President of Sterling Sugar for a number of years.

In addition to playing a critical role in the interests of the sugar cane industry this past legislative session, Mike previously has served as Chairman of the La. Farm Bureau Federation Sugar Advisory Committee, President of the St. Mary Parish Farm Bureau, and was a "Young Farmer of the Year".

(Continued on page 19)

THE BATON ROUGE LINE

(Continued from page 18)

A member of the Louisiana Senate since 1987, Mike represents District 21, which is composed of St. Mary and parts of Assumption, St. Martin and Terrebonne Parishes. Recently, he was appointed to chair Senate President Nunez' Action Committee. "Louisiana in a Global Economy" and was appointed to serve on the Joint Legislative Committee on Insurance. Additionally, he is a member of the Agriculture, Transportation, and Commerce Committees, and serves as Vice Chairman of the Transportation, Highways and Public Works, and Judiciary A Committees.

In addition to his very busy role as a State Senator, Mike is President of Bayou Sale Contractors, Inc. and M. J. Foster, Jr., Inc. He is managing partner in the Maryland Company, and Owner/Operator of Oaklawn Manor, which is a local tourist attraction.

Mike lists tennis, fishing, and hunting among his favorite hobbies. He is the sponsor of the Foster Elementary preschool class, a pilot program for the State's public school system, that is strictly for "at risk" four year olds.

Mike is married to the former Alice Cosner. He has two children, Ramelle and Murphy, and two step-children, Paul and Troy. He also has two grandchildren, Murphy and Clark.

Take Stock In America
Buy
U.S. Savings Bonds

PLANTING IS YOUR BUSINESS

OUR BUSINESS IS YOUR PLANNING
AND HOW YOU GROW FINANCIALLY

A. A. HARMON & CO.
(A Corporation of Certified Public Accountants)
Professionals in Planning for:

Cash Flow	Accounting	Taxes
Retirement	Computerization	Estates

311 Baronne Street, New Orleans, Louisiana 70112
Call collect — Glenn V. Weick or David M. Bassemier
(504) 586-0581

IN THE FACTORY

SUGAR MILL DAYDREAM

Stephen J. Clarke
Audubon Sugar Institute
Louisiana Agricultural Experiment Station

This month I have chosen to speculate on new technology which may have application in the industry — not dealing with the best technology currently available but with areas in which new research may lead to new processes and products. This subject could almost be described as the decision of what could be technically feasible and commercially desirable for the sugar industry in the next century and where the research effort would be focused.

This does not at all mean that we should neglect modern and established technology that may have application in Louisiana, e.g., extraction by diffusion, short retention time clarifiers, improved filtration systems, falling film evaporators, continuous vacuum pans, etc. The recovery of sugar from molasses fits into this category — the basic research has been done and it remains to be determined whether the process can be applied economically. The increasing importance of instrumentation and automation also fits into this group. The basic technology already exists and most of the activity in this area involves its application to current factory operations.

This article is perhaps best described as a daydream about what could be done in the cane sugar industry. It can be broken down into three separate areas; first, how can we improve the process for production of sugar; second, can we find other uses for sugar; third, are there other feasible uses for sugarcane. The second was touched upon last month and the last would not include ethanol production which already has a well established technology.

For crystalline sugar the basic unit operations are fixed and the overall process would remain the same, i.e., extraction, purification, concentration and crystallization. It is difficult to imagine an extraction system which is based on a principle other than milling or diffusion. Multiple effect evaporation will remain the primary concentration process although membrane systems could be used for part of the initial purification stage. Much of the membrane technology required is already developed but its use is restricted for economic reasons. Crystallization will continue to be in evaporative systems under vacuum, although boiling schemes may be modified due to changing sugar quality criteria and increasing juice purities.

Energy efficiency will obviously increase in importance but, again, the technology for improved steam usage is well established, especially in the beet industry. Similarly, the use of improved construction materials such as stainless steel and engineering plastics will increase.

A major challenge to the cane industry is to be able to produce an acceptable white sugar directly from the cane without any significant loss in overall recovery and with the minimum remelt of raw sugar. To achieve this will require higher purity syrups of lower

(Continued on page 30)

WASHINGTON UPDATE

(Continued from page 6)

program to operate at no cost to the taxpayer. He also said that with a price support of 18 cents per pound, sugar production in the United States has expanded and import quotas have had to be reduced in order to avoid forfeitures of sugar to the government.

Yeutter further stated, "Crunch time is coming, and the answer of our sugar industry has been to add to the 1990 Farm Bill provisions for a standby program of marketing allotments. What this means is that we're about to create another program where the government will artificially shrink supply in order to protect the taxpayer. What is not mentioned is that this will zap the consumer even more than at present." He said it was the Administration's view that Congress should not tamper with the sugar program in 1990, but should await changes that would be negotiated in the GATT trade negotiations. "The House, however, could not resist the temptation to change the program," he said. "In our judgement they made it worse, and that needs to be corrected in conference. If we're going to change it, let's make it better! Movement to less market orientation via supply management is something that should not be accepted," Yeutter concluded.

CROP PRODUCTION REPORT

In UDSA's latest crop production report released September 12, sugarcane production is forecast at 24.7 million tons, 1% less than the August 1, forecast and 16% below last year's output. Acreage if off 17% from a year ago reflecting the sharp 46% drop in Louisiana caused by last winter's freeze. The yield forecast of 34.9 tons per acre is 0.2 of a ton lower than a month ago, but 0.4 of a ton higher than the 1989 average yield. Output in all states except Louisiana is expected to be larger than a year earlier.

Sugarbeet production is forecast at 27.3 million tons, down 3% from August 1, but 9% above last year's harvest. The increase from last year is the combined result of higher yields and a 6% increase in acreage. Yields are expected to average 19.9 tons per acre nationally, compared with 19.4 tons in 1989. Production is expected to be up in all states except California and Colorado.

ATTENTION

ALLEE, ALLEE & ALLEN

Announces Its

Precision Grading Service
Lazerplane Equipped

★ Better drainage
★ Better weed control
★ Increase acreage

Also Agent for
Spectro Physics
Laser Plane Sale

St. James, Louisiana 70086
(504) 265-3965

THE SUGAR BULLETIN
(504) 448-3707

Table 1. Dates of planting and harvest for 14 outfield locations during 1989 in plant cane, first- and second-stubble crops on both light and heavy textured soils.

	Locations								
	B. Secour	Cinclare	F. Pearce	Georgia	Glenwood	Lanaux	Oaklawn	R. Hebert	St. John
				Plant-cane crop light textured soil					
Planted '88	09/23	09/22	10/19	10/10	09/20	09/09	10/13	10/06	09/27
Harvested '89	12/12	12/11	12/08	12/01	11/29	12/04	11/21	11/28	11/27
				First-stubble crop light textured soil					
Planted '87	09/10	—	09/12	09/25	09/28	09/15	09/23	10/01	09/18
Harvested '89	12/12	—	11/06	11/03	11/29	12/04	11/16	11/15	11/14
				Second-stubble crop light textured soil					
Planted '86	09/09	10/02	09/11	09/29	10/06	09/10	09/12	09/16	09/04
Harvested '89	11/02	10/31	11/06	10/23	11/08	10/18	10/26	10/25	10/24

	Locations				
	Allain	Evan Hall	Magnolia	McLeod	Oaklawn
		Plant-crop heavy textured soil			
Planted '88	10/14	10/12	10/11	—	10/13
Harvested '89	12/05	12/08	11/30	—	11/21
		First-stubble crop heavy textured soil			
Planted '87	09/08	09/11	09/30	09/09	09/23
Harvested '89	11/01	10/27	11/13	12/01	11/16
		Second-stubble crop heavy textured soil			
Planted '86	09/12	—	—	—	09/24
Harvested '89	11/01	—	—	—	10/26

TABLE 2. Yield data from the plant cane crop at 9 outfield locations on light soil during 1989.

Variety	Sugar per acre	Yield per acre	Sugar per ton	Stalk weight	Population
	(lb.)	(tons)	(lb.)	(lb.)	(No.)
CP 84-730	7835 +	27.8	282 +	3.07 +	18181
CP 76-331	7757 +	28.6 +	271 +	2.88 +	19977
CP 79-318	7550 +	28.6 +	264 +	2.68	21388
CP 83-644	7279 +	25.7	284 +	2.84 +	18083
LCP 82-89	7177 +	27.6	260 +	2.60	21376
LCP 83-153	7103	28.1	252	2.53 –	22366 +
CP 82-550	6984	25.6	272 +	2.30 –	22467 +
CP 82-551	6955	27.3	256 +	2.50 –	21852 +
CP 74-383	6885	28.9 +	240 –	2.50 –	23438 +
CP-65-357	6732	26.2	257 +	2.72	19374
CP 83-625	6665	25.0	268 +	2.30 –	21868 +
CP 70-321	6536	26.4	248	2.68	19751
L 84-290	6513	27.0	240 –	2.30 –	23748 +
MSD	606	2.2	7	0.12	1738

(+) or (–) denotes yields which are statistically higher or lower than CP 70-321 at 0.05 P.

TABLE 3. Yield data from the first-stubble crop at 8 outfield locations on light textured soil during 1989.

Variety	Sugar per acre	Yield per acre	Sugar per ton	Stalk weight	Population
	(lb.)	(tons)	(lb.)	(lb.)	(No.)
CP 76-331	7909 +	28.2 +	281 +	2.35 +	24091
CP 79-318	7690	28.5 +	271 +	2.30 +	25017
LCP 82-89	7604 +	28.2 +	270 +	2.01	28329 +
LCP 83-153	7594 +	28.8 +	264	2.16	26830
CP 83-625	7359	26.8	275 +	1.86 –	29609 +
CP 83-644	7086	24.3	293 +	2.29 +	21594 –
CP 74-383	7022	29.4 +	240 –	2.23 +	26475
CP 65-357	6752	25.2	269	2.34 +	21631 –
CP 70-321	6735	25.8	262	2.10	24740
CP 82-551	6677	24.9	269	2.09	24003
CP 82-550	6557	23.1 –	284 +	1.79 –	26068
MSD	634	2,2	8	0.12	2656

(+) or (–) denotes yields which are statistically higher or lower than CP 70-321 at 0.05 P.

TABLE 4. Yield data from the second-stubble crop at 9 outfield locations on light textured soil during 1989.

Variety	Sugar per acre	Yield per acre	Sugar per ton	Stalk weight	Population
	(lb.)	(tons)	(lb.)	(lb.)	(No.)
LCP 82-89	7045 +	29.9 +	236	1.87 –	32564 +
CP 79-318	6870 +	28.2 +	244 +	2.06	24611 +
CP 76-331	6775 +	27.3 +	248 +	2.05	28929 +
CP 82-551	6659 +	28.0 +	238	1.98	28483 +
CP 74-383	6014	28.3 +	212 –	2.12	26628
CP 82-550	5884	23.6	251 +	1.72 –	27811 +
CP 70-321	5495	24.1	229	2.05	23712
CP 65-357	4878	21.6 –	227	2.22 +	19695 –
MSD	658	2.5	12	0.10	3643

(+) or (–) denotes yields which are statistically higher or lower than CP 70-321 at 0.05 P.

THE SUGAR BULLETIN
206 E. BAYOU ROAD
THIBODAUX, LOUISIANA 70301
(504) 448-3707

TABLE 5. Yield data from the plant cane crop at 4 outfield locations on heavy textured soil during 1989.

Variety	Sugar per acre	Yield per acre	Sugar per ton	Stalk weight	Population
	(lb.)	(tons)	(lb.)	(lb.)	(No.)
LCP 82-89	7910	31.6	251	2.87	22034
CP 84-730	7647	28.4	271 +	3.34 +	17058 –
CP 83-644	7507	28.0	270 +	2.92	19201
CP 79-318	7476	28.9	259 +	3.00	19461
CP 74-383	7263	31.1	234	2.67	23484
CP 70-321	7231	30.1	241	2.83	21374
CP 82-550	7216	26.9 –	270 +	2.38 –	22887
CP 72-370	7194	29.7	243	2.73	21774
CP 65-357	7069	29.7	238	2.98	20040
LCP 83-153	6959	29.8	234	2.67	22217
L 84-290	6897	30.1	231	2.37 –	25730 +
CP 82-551	6884	29.5	234	2.65	22500
CP 83-625	6840	25.4 –	269 +	2.63 –	19523
MSD	NS	3.1	13	0.20	2788

(+) or (–) denotes yields which are statistically higher or lower than CP 70-321 at 0.05 P.

TABLE 6. Yield data from the first-stubble crop at 5 outfield locations on heavy textured soil during 1989.

Variety	Sugar per acre	Yield per acre	Sugar per ton	Stalk weight	Population
	(lb.)	(tons)	(lb.)	(lb.)	(No.)
CP 79-318	8467	30.5	278 +	2.38	25393
CP 76-331	8430	29.5	285 +	2.43	24624
CP 83-644	8345	28.7	291 +	2.35	24960
LCP 82-89	8084	29.9	273	2.15	27368
LCP 83-153	7636	29.7	255	2.12 –	28176
CP 70-321	7527	28.6	263	2.36	24272
CP 82-550	6747	24.1	279 +	1.81 –	26428
CP 82-551	6626	25.5	261	2.16	23531
CP 83-625	6596	23.2	284 +	1.80 –	25981
CP-65-357	6454	25.1	258	2.34	21079
CP 74-383	5991	25.3	239 –	2.04 –	24933
MSD	NS	NS	11	0.24	NS

(+) or (–) denotes yields which are statistically higher or lower than CP 70-321 at 0.05 P.

TABLE 7. Yield data from the second-stubble crop at 2 outfield locations on heavy textured soil during 1989.

Variety	Sugar per acre	Yield per acre	Sugar per ton	Stalk weight	Population
	(lb.)	(tons)	(lb.)	(lb.)	(No.)
LCP 82-89	8916 +	34.6 +	257	2.01	35215 +
CP 82-550	6959	25.9	268	1.80	28766
CP 74-383	6772	29.3	234	1.83	33306 +
CP 82-551	6751	27.6	245	1.94	28255
CP 76-331	6591	24.9	267	2.16	23688
CP 79-318	6385	26.3	244	2.23	23821
CP 70-321	6058	24.6	245	2.01	24168
CP 65-357	4606 –	20.4	233	2.17	18565
MSD	1300	5.4	NS	NS	7893

(+) or (–) denotes yields which are statistically higher or lower than CP 70-321 at 0.05 P.

First South Production Credit Association

SM

Farmer Owned Since 1934

Experienced and Knowledgeable Agricultural Lender

Offices in New Iberia and Thibodaux

Thibodaux

DEAN MARTIN
Loan Officer
(504) 446-9450

New Iberia

PATSY CHAMPAGNE
Loan Officer
(318) 364-0217

Louisiana sugarcane variety census

(Continued from page 15)

Barton Joffrion (Terrebonne), Dalton Landry (Lafourche), Harry Laws (West Baton Rouge), Donald Nolan (Assumption), Dr. Carlos Smith, Jr. (Avoyelles) and F. A. Swann, Jr. (St. Charles).

References

1. Fanguy, H.P. and D.B. Fontenot. 1989. The sugarcane variety census for the 1988 Louisiana crop. Sugar Bull. 67:14:10-11, 14-15.
2. Richard, C.A. 1990. Farm Notes by Dr. Charley Richard. Sugar Bull. 68(6):7, 16.

TABLE 1. Percent of area by geographical regions planted to sugarcane in Louisiana in 1989.

Variety	Geographic regions			
	Southeastern	Southwestern	Northern	State
	..... %			
CP 70-321	20 (−2)	57 (−1)	49(−1)	41 (−2)
CP 65-357	37 (+3)	25 (+2)	15 (+4)	28 (+3)
CP 74-383	10 (+3)	4 (−1)	15 (−2)	8 (−2)
CP 72-370	15 (+2)	7 (+1)	6 (−1)	10 (+1)
CP 72-356	6 (−3)	2 (+1)	5 (+1)	4 (−1)
CP 76-331	6 (0)	2 (+1)	8 (−1)	5 (0)
CP 70-330	1 (0)	1 (+2)	2 (0)	1 (0)
CP 79-318	2 (+1)	2 (+2)	Tr. (0)	2 (+1)
Other	3 (+2)	Tr. (−2)	Tr. (0)	1 (0)

[1] Values in parenthesis are percent change from 1988 census.

(Continued on page 27)

Variety Census *(Continued from page 26)*

TABLE 2. Variety preference as a percent of the total area planted to sugarcane in Louisiana from 1979 to 1989.

Variety	Year										
	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
	%										
NCo 310	11	7	7	5	2	1	Tr.	Tr.	Tr.	Tr.	Tr.
CP 48-103	7	5	4	2	1	1	Tr.	Tr.	Tr.	Tr.	Tr.
CP 61-37	10	5	5	1	1	1	Tr.	Tr.	Tr.	Tr.	Tr.
CP 65-357	61	71	66	60	51	38	29	24	22	25	28
CP 67-412	4	4	3	1	1	1	Tr.	Tr.	Tr.	Tr.	Tr.
CP 70-321	Tr.	3	9	16	22	30	38	41	42	43	41
CP 70-330	Tr.	3	5	9	7	5	4	4	3	1	1
CP 72-356		R[1]	Tr.[2]	1	6	9	10	9	6	5	4
CP 72-370		R	1	2	5	8	8	9	9	9	10
CP 73-351			R	Tr.	2	3	2	Tr.	Tr.	Tr.	Tr.
CP 74-383				R	1	3	6	9	11	10	8
CP 76-331						R	1	2	4	5	5
CP 79-318									R	1	2

[1] R. — Year released [2] Tr. — Less than 1% of state acreage

GOODYEAR

GOODYEAR TIRES FOR YOUR CAR, TRUCK, FARM OR OFF HWY. EQUIPMENT

NOBODY FITS YOU LIKE GOODYEAR

- 24 HR. ROAD SERVICE
- COMPLETE AUTOMOTIVE CERTIFIED SERVICE
- TRUCK TIRE BALANCE AND ALIGNMENT

SPECIAL
SURE-GRIP TD-8

SUPER TRACTION • SUPER STRENGTH

GENERAL ELECTRIC AUTHORIZED DEALER

7:30 AM - 6:00 PM MON. - FRI.
7:30 AM - 1:00 PM SAT
1203 ST. PATRICK HWY
THIBODAUX

PIT STOP
YOUR ON FARM SERVICE SPECIALIST

GOODYEAR AUTO SERVICE CENTER
1-800-256-1269 (504) 447-2696

More on Mechanical Planters

(Continued from page 17)

addition alone has greatly reduced the amount of damage done to seedcane during planting because the whole load of seed is being pushed toward the drum evenly and loosely. When the drum fingers make contact with the cane there is less resistance so the cane comes out of the wagon freely and with less chance for damage. He also has the ability to move the whole load forward or backward at any time if needed. The floor slats and the gate stop moving toward the drum automatically when the planter is empty and then return to the loading position for the next load. These floor slats have recently been copied and used on both back end planters and planter's aid wagons and are working very well on both.

He has found that by lifting his planter wagons and mounting them on tandem running gear that he can plant tall seed cane with little or no problem. He also tried to lengthen the planters to 28 ft. long, so more seed could be carried, but found that 24 ft. long wagons are big enough and cause less problems when turning into or out of the cut. He has found that the front end planters with floor slats will hold more seed than back end planters because the seed cane can be placed in a more upright position.

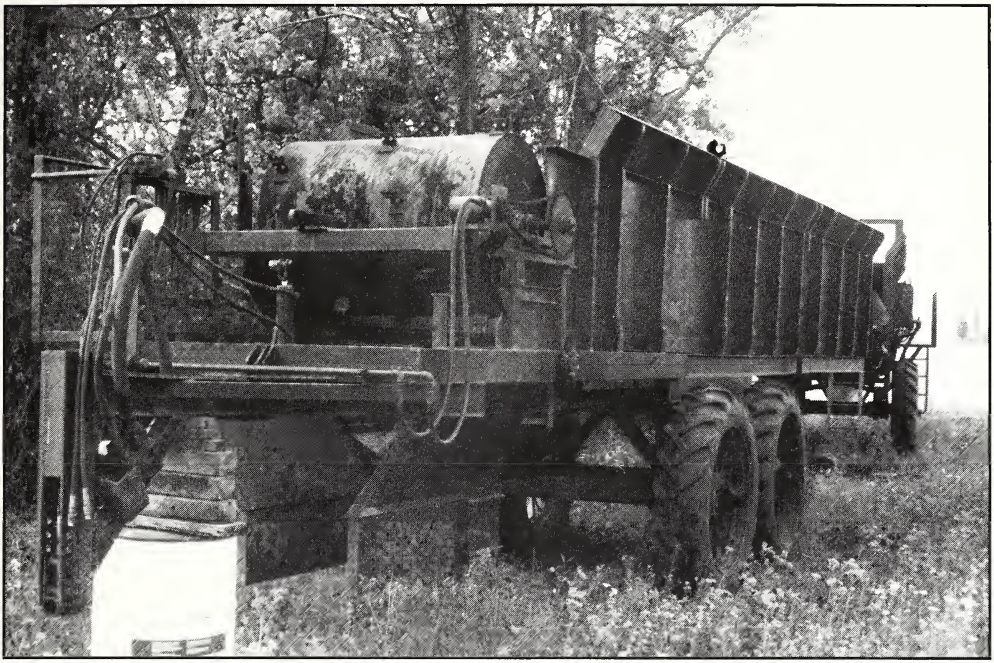
A slow turning drum has been shown to be the least damaging way of getting the cane out of the wagon thus far. He has tried a slat or carrier type arrangement, but feels that the slow turning drum is more economical to operate.

The amount of seed cane needed, as well as the damage that mechanical planters do to seed cane has always been of concern to him. Mr. Adams intends to place the speed control for the drum next to the driver. This will allow the driver the flexibility to increase or decrease the flow of seed cane immediately while in motion. Mr. Adams will quickly admit that although his planter is not the perfect planter and that growers have been working with mechanical cane planters for a long time, significant progress has been made, especially in the last few years. Mr. Sonny summed it up like this. "There have been front end planters in use before this machine was built and drums have been used for a long time. Putting these ideas together with the floor slats has proven to be satisfactory for my operation. If we keep working at it, one day somebody is going to succeed in making the perfect sugarcane planter."

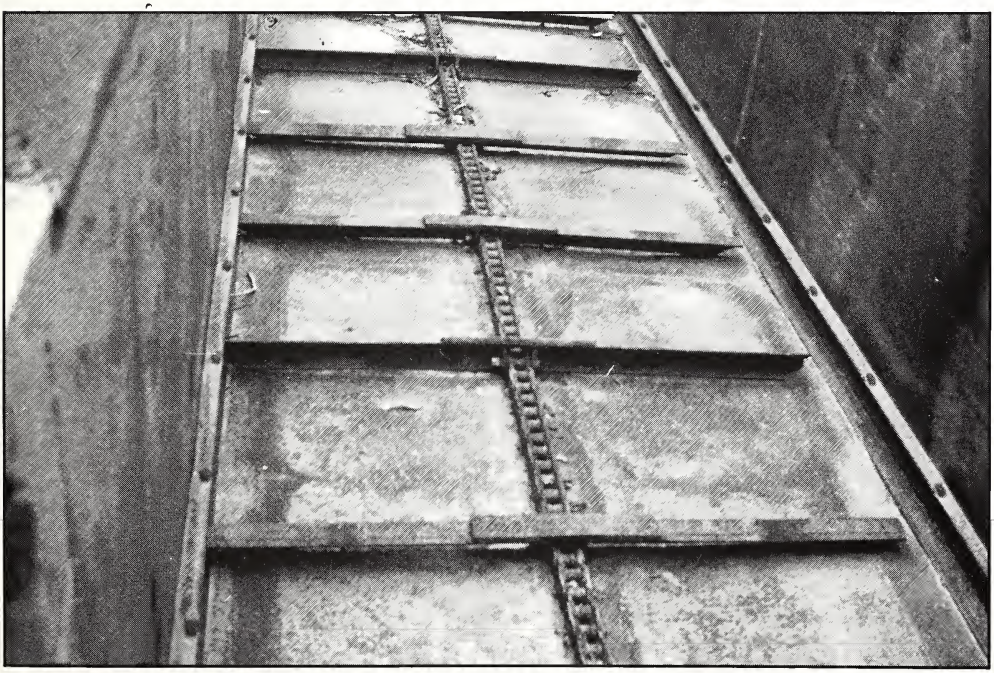
(See photos, page 29)

PATRONIZE
THE
ADVERTISERS
WHO
PATRONIZE
THE
SUGAR
BULLETIN

Mechanical Planters *(Continued from page 28)*



Front view of Front-end planter.



Floor slats spaced 18 inches apart on Front-end planter.

 (Continued from page 20)

invert, color, ash, etc. Very high polarization sugars cannot be boiled efficiently from massecuites with the typical purities we now see in the cane industry. First strike massecuite purities in the beet industry are usually in the low nineties and invert content is much lower.

The improving quality of cane that we are seeing in recently released varieties may contribute to reaching this goal if the juice purities are higher than for the established varieties. If the juice purity remains the same but the sucrose content increases, this is good, but it would require increased capacity for standard processing rather than giving the opportunity for radical improvement in sugar quality. The genetic potential for significant purity increases appears to be present in cane but it will be some time before this can be realized. Higher purity juices will not necessarily reduce color and ash; major sources of these sugar quality problems are the extraneous matter delivered with the cane. Significantly reduced levels of dirt and leaves are required to minimize the introduction of ash and color into the sugar being produced.

The critical area for production of sugar with the desired quality is the purification or clarification stage. The basic process, a combination of liming and heating, has not changed in more than a hundred years. The process has been improved by use of polymeric flocculants, better pH control and short retention time clarifiers but it still remains basically the same. The introduction of syrup clarification, when combined with a modern sulfitation system (for example, the Blanco Directo process), can produce some white sugar of acceptable quality from the first strikes, raw sugar also being produced. In last year's annual report of the South African research group, they comment on chemical color removal in raw sugar manufacture (referring to sulfur dioxide, hydrosulfite and bentonite) "the cost of these chemicals in the raw house was, however, higher than the color penalization applied to export sugar, and it was also higher than the cost of decolorization in a refinery". We therefore need to look for a process which will minimize introduction of color into the factory, rather than seeking methods to remove it.

Since cane, in contrast to beets, stores its sugar above the ground, there is much more natural pigment in processed cane than in beet. In cold juice much of this material and color precursors remain in suspension, rather than being truly in solution. The conventional clarification by heating causes solubilization of this and other materials, for example starch. A clarification process which avoided heating until the bulk of such material has been removed could reduce color in juice very significantly. Preliminary tests of ambient temperature clarification systems, using the technology of potable water treatment, show promising results. Two major problems are associated with the approach; one, heating sterilizes the juice and keeping the juice cool for a longer time may cause significant microbial degradation and, two, when heated prior to evaporation, cool clarified juice produces a fine precipitate which needs to be removed by filtration. It would probably be desirable to completely filter the juice in any case but the problem of sterilization may be more difficult.

(Continued on page 31)

IN THE FACTORY

(Continued from page 30)

Short retention time evaporators, such as falling film systems, would be desirable to minimize color development in process. Syrup clarification, as practiced in the refinery, and modified boiling house operation would also be required to limit the recirculation of non-sugars. The basis of the system would be a radically different clarification system — this needs extensive study and I hope that we researchers are up to it.

FOR THE
LATEST
INFORMATION
in the
SUGARCANE
INDUSTRY
and
FARM
PRODUCTS

READ
and
ADVERTISE
in

THE
SUGAR
BULLETIN

THE SUGAR BULLETIN

Mailing List Update

☐ Address change. Please attach top portion of front cover containing your name and address.

☐ I no longer wish to receive THE SUGAR BULLETIN. Please remove my name from your mailing list.

Name _____

Address _____

City _____

State _____ Zip _____

Mail to:

THE SUGAR BULLETIN
P.O. DRAWER 938
THIBODAUX, LA. 70302

For changes in present subscription, address imprint from front cover **must be attached.**

Commercial Members of the
AMERICAN SUGAR CANE LEAGUE
OF THE U.S.A., INC.

ASSUMPTION BANK & TRUST CO.
P.O. Box 398 Napoleonville, LA 70390

THE BARTLETT COMPANY
Chemical Brokers
4955 River Road
P.O. Box 10710
Jefferson, LA 70181

THE CROPMATE COMPANY
Fertilizer Region
P.O. Box 28 Thibodaux, LA 70302

CAMECO INDUSTRIES, INC.
P.O. Box 968 Thibodaux, LA 70301

FIRST COMMERCIAL BANK
521 Main St. Franklin, LA 70538

DUPLANTIER, HRAPMANN,
HOGAN, & MAHER
Certified Public Accountants
821 Gravier Suite 1300
New Orleans, Louisiana 70112

ESTES REFRACTORY
P.O. Box 94 Jeanerette, LA 70544

THE FIRST NATIONAL BANK
IN DONALDSONVILLE
P.O. BOX 108 Donaldsonville, LA 70346

F. C. SCHAFFER & ASSOCIATES, INC.
1020 Florida Blvd.
Baton Rouge, LA 70802

GULF ENGINEERS & CONSULTANTS, INC.
535 Main Street
Baton Rouge, LA 70802

WESTWAY TRADING CORP.
228 St. Charles Ave., Suite 700
New Orleans, LA 70130

NADLER, INC.
P.O. Box 359
Plaquemine, LA 70765

NATIONAL BANK
FOR COOPERATIVES
Jackson Region
1800E, County Line Road
P.O. Box 16099
Jackson, MS 39236

OUACHITA FERTILIZER
Route 7, Box 49-F
New Iberia, LA 70560

DRAVO LIME COMPANY
Pelican State Division
12797 Scenic Highway
Baton Rouge, LA 70807

SELF INSURANCE ADMINISTRATORS
P.O. Box 11509
New Iberia, LA 70562-1509
A Member Company of Huval Insurance Group

FIRST SOUTH PCA
P.O. Box 667 Thibodaux, LA 70302
P.O. Box 10908 New Iberia, LA 70562

STANDARD SUPPLY & HARDWARE
CO., INC.
P.O. Box 60620 New Orleans, LA 70160

ST. MARY BANK & TRUST CO.
Franklin, LA 70538

LOUISIANA CANE MFG., INC.
P.O. Box 71 Thibodaux, LA 70301

WHITNEY NATIONAL BANK
228 St. Charles Avenue
New Orleans, LA 70130

RAYNE STATE BANK
AND TRUST COMPANY
P.O. Box 99
Duson, LA. 70529

3-D CHEMICAL, INC.
P.O. Box 607
St. Martinville, LA. 70582

Sugar Bulletin
E. Bayou Rd.
odaux, La. 70301

dress Correction Requested)

BULK RATE
U.S. POSTAGE
PAID
PERMIT NO. 43
Thibodaux, La.

SERIALS DEPT.
LOUISIANA STATE UNIV.
LIBRARY
BATON ROUGE LA 70803

The Sugar Bulletin

OFFICIAL BULLETIN OF THE AMERICAN SUGAR CANE LEAGUE OF THE U.S.A.

Up Front With The League by P. J. deGravelles, Jr. 5
Washington Update With Don Wallace 6
Farm Notes by Dr. Charley Richard 8
The Baton Rouge Line by Tom and Linda Spradley 10
In The Factory by Stephen J. Clarke 12
Tissue Culture Research at Houma by David M. Burner 13
Succession Cane in Louisiana by Ray Ricaud and Allen Arcenaux 14
Bristol-Myers Squibb News Release 16

We stand for the encouragement of Home Industries as against Foreign Competition

Vol. 69 — No. 2 NOVEMBER 1, 1990

The Sugar Bulletin

The Official Organ of the American Sugar Cane League of the U.S.A., Inc.

P. J. deGravelles, Jr., Editor and General Manager
Charles A. Richard, Ph.D., Director of Research and Field Representative
Windell R. Jackson, Senior Agronomist
Herman Waguespack, Jr., Agronomist
John Constant, Business Manager
Nannette B. Nickens, Office Secretary

Washington Representative:
Wallace and Edwards, Inc.
1150 Connecticut Avenue, N.W.
Suite 507
Washington, D.C. 20036
Phone: (202) 331-4331

Baton Rouge Representative:
Spradley and Spradley
6216 Riverbend Boulevard
Baton Rouge, LA 70820
Phone: (504) 766-1359

Editorial and Executive Office:
206 E. Bayou Rd., Thibodaux, LA. 70301
Phone: (504) 448-3707

OFFICERS AND MEMBERS OF THE BOARD OF DIRECTORS OF THE AMERICAN SUGAR CANE LEAGUE

William S. Patout, III, Jeanerette, LA
President
Dr. Daniel Viator, Youngsville, LA
1st Vice-President
P. J. "Pete" deGravelles, Franklin, LA
Vice President — General Manager
Don Wallace, Washington, DC
Vice President — Government Relations
Patrick Cancienne, Belle Rose, LA
Treasurer
Irving Legendre, Jr., Thibodaux, LA
Secretary

Pat Accardo, Franklin, LA
Bryan Allain, Jeanerette, LA
J. G. Beaud, Jr., New Roads, LA
Bert Beyt, Jeanerette, LA
Ramon E. Billeaud, New Orleans, LA
Felix Blanchard, New Iberia, LA
Ronald Blanchard, Napoleonville, LA
Neal Bolton, St. James, LA
Joseph E. Boudreaux, Thibodaux, LA
Fred Y. Clark, Franklin, LA
Lawrence Dugas, New Iberia, LA
Dan Duplantis, Raceland, LA
Paul Ellender, Bourg, LA
John F. Gay, Plaquemine, LA
Ronald Gonsoulin, New Iberia, LA
Mike Graugnard, Edgard, LA
Warren Harang, III, Donaldsonville, LA
Roddy Hulett, St. Martinville, LA
Bobby Judice, Franklin, LA
Kenneth Kahao, Port Allen, LA
Denis Lanaux, Killona, LA
Melvin Landry, New Iberia, LA
D. C. Mattingly, Paincourtville, LA
Jerry McKee, Thibodaux, LA
Kenneth Peltier, Thibodaux, LA
R. L. Roane, Jr., Jeanerette, LA
Howard Robichaux, Labadieville, LA
Raphael Rodriguez, Franklin, LA
Mel Schudmak, White Castle, LA
Frank Sotile, Donaldsonville, LA
David Stewart, Lakeland, LA
Roland Talbot, Thibodaux, LA
Jackie Theriot, Breaux Bridge, LA
James Thibaut, Donaldsonville, LA
Glenn Timmons, Brusly, LA
Eugene Woods, Paincourtville, LA

HONORARY MEMBERS

Joseph G. Beaud, Sr., New Roads, LA
Charles Billeaud, Broussard, LA
Paul G. Borron, Jr., Plaquemine, LA
Jerry L. Dickson, New Orleans, LA
Gilbert J. Durbin, New Orleans, LA
F. Evans Farwell, New Orleans, LA
J. N. Foret, Jr., Thibodaux, La.
Andrew Gay, Plaquemine, LA
F. A. Graugnard, St. James, LA
Warren J. Harang, Jr., Thibodaux, LA
Lloyd Lauden, New Orleans, LA
E. W. McNeil, Brusly, LA
J. Randolph Roane, Jeanerette, LA
Charles C. Savoie, Belle Rose, LA
Edward T. Supple, Bayou Goula, LA
E. Berkshire Terrill, Brusly, LA
John Thibaut, Napoleonville, LA
M. V. Yarbrough, Fort Smith, Ark.

POSTMASTER: Send address changes to THE SUGAR BULLETIN, 206 E. BAYOU RD., THIBODAUX, LA. 70301.

MAXXUM™

One of the most durable parts on a MAXXUM tractor is made of paper.

Everything on the new Case International MAXXUM tractors is designed to last, including the 5-year, 5,000-hour warranty on the *entire* tractor.* That's the best warranty in the business, by far.

It just goes to show how much Case International believes in the durability and reliability of MAXXUM tractors.

What makes the MAXXUM tractor so durable? It comes equipped with one of three proven Case International diesel engines. They're durable, dependable and guaranteed to deliver both high torque rise and high fuel economy. You can feel confident knowing that more than 250,000 similar engines are in use around the world. Count on them to perform — trouble-free — for thousands and thousands of hours.

Come in to see the Case International line of MAXXUM tractors today.

* Excluding tires, which are covered by their own manufacturer's warranties. A $200 deductible applies to each repair after the first year.

[a]JI Case Company 1989

Switzer Sales and Service
Jeanerette, LA
(318) 276-6384

Gremillion's, Inc.
New Roads, LA
(504) 638-6347

Lanier Int'l. Inc.
Abbeville, LA
(318) 893-1988

Lemann's Farm Supply Inc.
Thibodaux, LA
(504) 447-3776

Baton Rouge, LA
(504) 357-6453

Donaldsonville, LA
(504)473-7927

case IH

1990 Louisiana Sugar Cane Festival

Queen Sugar XLIX, Monica Hargett and King Sucrose XLIX, Fred Y. Clark at Coronation of Queen Sugar.

King Sucrose XLVIII Irving E. Legendre, Jr., Queen Sugar XLVIII Wendy Rhea Thomas, in Sugar Cane Growers/ Processors Parade.

UP FRONT WITH THE LEAGUE

By P. J. deGravelles, Jr.

The fall of each year brings forth a large number of harvest festivals throughout the state of Louisiana. Two of these festivals honor the Louisiana sugar industry.

THE LOUISIANA SUGARCANE FESTIVAL AND FAIR ASSOCIATION in New Iberia was held on September 27-30, 1990. This was the 49th Sugarcane Festival. The first festival was held in 1937. Governor Earl K. Long served as King Sucrose I in 1938. With the exception of four years during World War II, it has been held in late September each year. Fred Y. Clark of Franklin, Louisiana serves as King Sucrose XLIX. At the coronation held Saturday night during the festival, Monica Hargett of Lafayette, a student at the University of Southwestern Louisiana, was selected as Queen Sugar XLIX. These two monarchs will reign until the Sugarcane Festival in 1991. The entire festival consisting of a Queen's contest, variety contest, flower show, high yield award luncheon, quilt making, photography contest and other events is handled by a group of very dedicated volunteers from New Iberia, who do an outstanding job. If New Iberia is the "Queen City of the Teche," I believe it is appropriate to say that the Louisiana Sugarcane Festival is the KING of festivals in Louisiana. Mrs. Miriam Krepper, President of the Louisiana Sugarcane Festival and Fair Association, and her many capable co-workers are to be congratulated on a superb festival again in 1990. They are looking forward to 1991 when the Festival will be celebrating its Golden Anniversary. Plans are already underway to make it the best Sugarcane Festival ever.

THE SUGAR & SPICE FESTIVAL, sponsored by the Thibodaux Chamber of Commerce, held its 4th annual festival on Sunday, October 7, 1990, at the Thibodaux Civic Center. The annual event is held to promote the public awareness of the importance of the Louisiana sugar industry. The Chamber donates a portion of the proceeds to sponsor a scholarship for an agriculture student at Nicholls State University in Thibodaux. The Sugar and Spice Festival sponsors a cook-off and tasters contest (all food must use sugar in the recipe) and sugar cane variety contest. As a person who tasted each entry, I can assure you the food was excellent. Mr. Ambrose Landry, retired Lafourche Parish Clerk of Court, again served as Chairman of the Festival. Mr. Landry and his committee are to be congratulated for staging an outstanding event.

On behalf of the Louisiana sugar industry, I would like to thank those two festivals for their efforts in promoting our industry. These festivals also give us the opportunity to have a little "R&R" before the annual harvest of the sugarcane crop. Thanks to all who make this possible.

Liquid Fertilizers
For Sugar Cane

NEW IBERIA, LA. (318) 367-8233

WASHINGTON UPDATE WITH DON WALLACE

CONFEREES COMPLETE WORK ON FARM BILL

A conference committee appointed to reconcile the differences in the House and Senate versions of the 1990 farm bill completed its work October 16, approving a five-year plan for farm programs that would set limits for commodity subsidy payments and achieve the mandated $13.6 billion in budget cuts over five years. The cuts were forced on the committee by the budget agreement calling for $40.1 billion in deficit reductions in fiscal 1991 and a total of $500 billion over the next five years (see budget story below).

On sugar, the conferees agreed to the House version of the farm bill which: (1) continues the sugar loan rate at the current 18 cents per pound; (2) extends term of loan from 6 to 9 months; (3) maintains the no-cost to government requirement; (4) includes a minimum annual import quota of 1.25 million short tons and allows USDA to impose marketing controls on domestic producers in any year when the quota was expected to fall below that amount; and (5) sets a 200,000 ton sugar-equivalent limit on marketings for crystalline fructose.

Now that the conferees have reconciled their differences on the farm bill, the House and Senate will have to vote on the compromise package before sending it to President Bush to sign into law. Administration representatives have indicated the President would be satisfied with the compromise agreement.

In addition to the sugar provisions contained in the farm bill, under the budget agreement the committees included a 1 percent market service payment to be assessed on all domestically-produced sugar. The assessment would be 1 percent of the loan rate times the amount of sugar produced in the United States. At press time, details were still being worked out on how the assessment would be implemented.

BUDGET CUTS

As reported above, the House and Senate Agriculture Committees were instructed to raise $1.0 billion in savings from mandatory program cuts in fiscal 1991 and a total of $13.6 billion over five years. The two committees reached agreement October 16 on how the required savings would be achieved. The bulk of the budget savings will come from a mandatory 15 percent "triple-base" flexibility program beginning in 1991 for farmers of rice, feed grains, wheat and cotton who participate in federal price support programs. Under the so-called "triple-base" program, government subsidies would not be paid on the crops planted on 15 percent of a farmer's base acreage, but farmers could plant a variety of other crops, except fruits and vegetables, on that portion of the land to sell on the open market. Also, farmers would be given more flexibility in their planting decisions as they would be allowed to devote up to an additional 10 percent of their acres to other non-program crops. In addition a marketing loan for soybeans was approved at a level of $5.02 per bushel with a 2 percent loan origination fee to be assessed on farmers participating in the program.

For non-program commodities, assessments were put on sugar, peanuts, tobacco, wool and mohair, honey and dairy. As reported in the story above a 1 percent assessment will be levied on all domestically-produced sugar.

These budget recommendations have been forwarded to the House and

(Continued on page 20)

At last. A truly NEW Loader that makes a difference. the Tiger from LA CANE

Feature for feature the Tiger Series offers benefits unmatched in any other loader.

180° Swing Loaders • 3 and 4 wheel drive • 2000 Lb. Grab Capacity Elevator Piler • Straddles 2 Rows. *Plus . . .*

Spacious, quiet cab-air conditioned
Excellent vision — high, low, all around
Extremely comfortable Reclining Seat Fully Adjustable
Excellent positioning of all Loader Controls and Guages
Perfect feel of all Loader functions (fine metering control)
Superior cylinder and propulsion speeds
Excellent swing cushions with quick return
Quick release / tight closing Grab
4 speed hydrostatic transmission
No flexing to get in and out of pilers
and more

A Product of Louisiana Cane Manufacturing, Inc.

Building on a tradition — serving a proud industry.

P.O. Box 71 Thibodaux, La. 70302 USA
Phone 504-447-3771 FAX 504-447-8404

FARM NOTES By Dr. Charley Richard

1989 FINAL YIELDS — HARVEST SEASON BEGINS SPECIAL LOCAL NEED LABEL FOR GRAMOXONE EXTRA

Final yields from the 1989 crop have been calculated and can be seen in the table below as compared to the 1988 and 1987 crops.

Yield Category	1987	1988	1989
Acres harvested for sugar	263,000	279,000	294,000
Gross tons of cane ground	6,665,000	7,763,000	8,329,000
Tons of sugar produced (raw value)	748,000	814,000	864,000
Tons of cane per acre	25.3	27.8	28.3
Pounds of sugar per acre	5,688	5,835	5,878
Pounds of sugar per ton of cane	225	210	207
Recovery rate per gross ton	11.25	10.50	10.37
Molasses produced	35,672,000	41,403,000	40,400,000

It should be noted that sugar production of 864,000 tons and sugar per acre of 5,878 pounds are new records for Louisiana. It should also be noted that the sugar production records in years 1987 to 1989 are the three highest consecutive years this industry has seen in its history. How ironic it is that they will be followed by one of the worst production years as a result of the December 1989 freeze. The three year average of total sugar production (1987 to 1989) gives us an average of almost 810,000 pounds of sugar. Considering that this industry is in a fringe area when it comes to the environment sugarcane requires, as the old farmers would say, this production level ain't half bad! The varieties that are now being grown (even with their faults that growers are so quick to point out) in the weather conditions that have existed during the last three years have permitted this yield. However, how quickly reality can strike. The freeze of December 1989 will change the harvested acres for 1990 to something like 185,000 and total sugar production will undoubtedly be below 400,000 tons raw value. We have said all along that growers should be careful about setting their budgets based on incomes from the 87, 88 or 89 crops. The level of income, or rather the lack of, in 1990 will send most budgets in the opposite direction.

HARVEST SEASON BEGINS

As this article goes to print on October 16, 1990, the first factory is starting its grinding operation. South Coast Sugars Inc. in Raceland will be the first mill to begin operations during the 1990 crop. Because the least amount of damage to the crop in the cane belt occurred in the lower Bayou Lafourche area, there is more cane to grind there; thus, the earliest starting date in a season when everyone is starting late. By November 1, only 10 of the 19 mills expected to grind cane this year will have started. However, all mills are expected to start operations by November 12.

During the 1989 crop there were 21 mills in operation. Earlier this year the Oaklawn factory announced it would no longer operate, bringing the total

(Continued on page 9)

 (Continued from page 8)

number of operating factories in Louisiana to 20. Because of the severe damage to the cane crop in the Western Bayou Teche area, St. Martin Sugar Co-op and Breaux Bridge Sugar Co-op will merge operations for the 1990 crop. Together they expect to grind only some 25% of the total amount of cane ground during 1989. This leaves 19 mills operating during 1990 although Breaux Bridge expects to grind in future years bringing the total number of operating mills back to 20 in 1991.

Pre-harvest cane quality values seen to date would indicate that early sugar content is not as good as during the three previous crops. It should also be noted that these numbers are for clean cane and may not reflect the unusually grassy condition of much of the cane that will be delivered early in the grinding season. During the second week of October a cold front produced temperatures in the mid-40's throughout much of the cane belt. This should help the ripening process and hopefully will give us better sugar.

As of this writing, many growers have completed their planting operations. The northern cane area around Bunkie, and the Parishes of Iberia, St. Martin, Iberville and Pointe Coupee are the areas which still have the most amount of land to plant due to rains which fell during late September and early October. Most growers still plan to complete their planting operation prior to beginning the harvest season.

SPECIAL LOCAL NEED LABEL FOR GRAMOXONE EXTRA

Gramoxone Extra herbicide has received a Special Local Need label as a harvest aid in sugarcane in Louisiana for 1990 because of the grassy condition of the cane crop. This material is used as a harvest aid in other crops to help dry up leaves and it was thought that it could have some potential in Louisiana sugarcane. However, of all the pesticides used in cane, this, may be the most dangerous from a health standpoint and from drift problems. At a meeting where use of this material was discussed the following key points were made concerning its use:

ABSOLUTELY READ AND FOLLOW THE LABEL AND SUPPLEMENTAL LABEL!

Application should NOT be made in areas of proximity to residences, schools, and non-target areas.

Use of an effective drift control is strongly recommended.

Some type of wind direction/velocity device should be used at target site.

Do not apply to fields where people or animals are present.

Adhere to the master label on worker safety rules.

Do not re-enter treated fields until spray has dried.

The label states that 7 to 12 ounces of Gramoxone Extra per acre be used. It is suggested that the 12 ounce rate be used.

The label states that Gramoxone Extra be applied 3 to 14 days before harvest. Spraying cane more than 5 days prior to harvest may result in a loss of sugar per ton.

To cover cost of material and application, growers would need to receive an increase of approximately 75 pounds of sugar per acre. Available test data from Dr. Ben Legendre indicate that there was no reduction in trash percent cane from the use of paraquat/Gramoxone Extra.

EXTREME CAUTION MUST BE USED IN THE APPLICATION OF THIS PRODUCT BECAUSE THE LOUISIANA DEPARTMENT OF AGRICULTURE WILL CANCEL THE LABEL IF COMPLAINTS ARE RECEIVED.

THE BATON ROUGE LINE

By Tom and Linda Spradley

MEET YOUR LEGISLATOR

This month we continue to introduce you to the legislators that represent you. These representatives have been very supportive of the sugar industry, and we would like for you to get to know them a little better.

Rep. Harry Benoit has been a state representative since 1981. He represents District 45, which includes most of St. Martin Parish. Harry is a life long resident of this area.

Always helpful on matters related to the sugar industry, Harry serves on the House Ways and Means Committee and the House Natural Resources Committee. Ways and Means oversees all fiscal matters of the state while Natural Resources handles issues related to natural resources and environmental concerns.

Harry is a graduate of Breaux Bridge High School, Class of '58, and attended the LSU Institute of Insurance Marketing. He also served in the United States Marine Corps.

Voted 1982 winner of the Outstanding Citizen Award, Harry is past chairman of the Breaux Bridge Planning & Zoning Commission and a member of the Board of Directors of the Louisiana Thoroughbred Association.

Harry is married to the former Bobbie Blanchard, and they have two children.

Rep. Warren Triche is the son of Daisy and Warren Triche, Sr. Married to the former Pam Tauzin, Warren and his wife live in Chackbay with their only son, Bobby-Warren.

Warren graduated from Nicholls with Bachelor's and Master's degrees in Education. Having taught on the elementary, secondary, and higher education levels, he currently is an assistant professor in the Freshman Division at Nicholls.

His political career began as a school board member representing Ward 6 of Lafourche Parish. Re-elected twice without opposition, he served in that capacity until he became state representative for District 55 in 1988.

Warren, who has been supportive of issues of concern to the sugar industry, serves on three standing committees: Retirement, Natural Resources, and Transportation. He also serves on five sub-committees, including: Environmental Affairs, Coastal Erosion, Wildlife & Fisheries, Oversight, and Public Works Planning and Construction.

Besides his legislative duties, Warren is a member of various clubs and organizations, such as: Red Cross, American Legion, Bayou Council on Alcoholism, Knights of Columbus, Thibodaux Chamber of Commerce, and Bayou Industrial Group.

Rep. Jimmy Dimos, Speaker of the House of Representatives, recently recognized Warren as a conscientious and dedicated legislator while appointing him to the Audit Advisory Council, replacing Rep. V.J. Bella, who accepted the position of State Fire Marshall.

EDITOR'S NOTE: In the last issue of the Sugar Bulletin, Sen. Mike Foster was incorrectly listed as Rep. Mike Foster. Mike Foster has served in the State Senate since 1987. Our apologies for the error.

CLASSIFIED

FOR SALE: 72 Cane Loader on 1066 IH Tractor — $7,500. 74 KW Truck 13 speed — $3,200. 68 KW Truck 13 speed winch on back — $5,000. 70 Dump Trailer — $1,900. 3 Row Chopper with attachments — $1,500. 4 Cane Carts Davis — $12,500. 74-1466 IH $4,900. Financing available on all sales. Call Carl Plessala at (318) 367-2152.

FOR SALE: No. 12 Cat Motor Grader New Tires — $3,350. 1970 Tandem Int'l Truck Diesel Eng. — $2,500. Ford Truck with winch pipes and bed — $5,000. Back Hoe to Fit Back Tractor — $1,000. Front End Loader to Fit Front Tractor — $5,000. Call Erne Plessala at (318) 229-4971.

WANTED TO BUY: Old Case Tractor for CCS or DES. Call Erne Plessala at (318) 229-4971.

BUY-SELL-TRADE: Hi Clearance Tractors: JD 4430 $16,000, JD 4020 $6,250, JD 4010 $5,250, JD 3020 $6,250, Int 706 $4,250. Low Clearance: JD 1086 $7,250, JD 1466 $4,500. Broussard Cane Loader Mounted 560 for $3,500. 14' 1630 JD Disc $2,500, 40' Land Level $2,500. Call: Dugas Farm, Inc., St. Martinville (Parks) LA, (318) 845-4774.

IN THE FACTORY

KENAF AND OTHER CROPS

Stephen J. Clarke
Audubon Sugar Institute
Louisiana Agricultural Experiment Station

This month's subject is prompted by a recent report, in the local newspaper, or renewed interest in kenaf as a supplementary crop for sugarcane. The interest in possible crops that could supplement sugarcane is fairly constant, with sweet sorghum being a perennial favorite. Kenaf has a long history in Asia and Africa and became the subject of quite intense study in the Western Hemisphere during the second world war as a substitute for jute for use in fibrous products such as rope. Interest was again high in the mid to late sixties when a shortage of wood pulp for paper production was feared. Several conferences were organized and extensive agronomic work was done by the USDA, as well as some studies of its processing characteristics, including runs on the mill at the Audubon Sugar Factory and on the most suitable techniques for pulp production.

At first glance it would appear that any tall fibrous crop could be processed in a conventional milling tandem. The reasons for doing so would be either to produce a product of for energy production. These two cannot be separated and the question becomes more a decision on the balance between them. As complements to conventional cane, there have been flurries of interest in "energy cane" (cane grown for maximum tonnage in the field and with processing of all plant material), high fiber cane (much higher fibre content and yield per acre, but much reduced sugar content), sweet sorghum (both conventional and higher fiber varieties), kenaf and banana grass, etc. (currently under study in Hawaii). In each case, with the possible exception of sweet sorghum, there is a problem of the balance in the sugar factory between the sizes and energy requirements of the extraction system and of the processing system. Of course, this assumes that the processing of the alternative crop would follow the same basic scheme as used for cane. If net energy production is most important, the extraction / fibre preparation system would minimize extraction and emphasize moisture reduction, thereby reducing the internal energy demand for milling and processing and maximizing fuel production. This may well be the choice with "energy" cane and high fiber cane. If energy is the desired goal, then quantity of fibre becomes more important than its quality. The reverse is the case with kenaf since it would be grown for its high quality long fibre.

Kenaf is a fast growing stalk which grows to a diameter of up to an inch during a growing season of 120 to 150 days and reaches 10 to 15 feet in height. Tonnage per acre in the United States is usually up to 10 tons, with 14 tons being reported in Kansas. If kenaf is to be grown in conjunction with cane, there could be problems with pest control, especially with insects. An integrated pest management scheme would need to be considered.

Kenaf has traditionally been grown as a fiber crop and for these uses only

(Continued on page 23)

Tissue Culture Research at Houma

D. M. Burner
USDA-ARS
Sugarcane Research Unit
Houma, LA

Introduction

Plant tissue culture is a method of artificially producing, under sterile laboratory conditions, whole plants from cells, tissues, or organs of a donor plant. Sugarcane was one of the first crop species with recognizable potential for improvement through tissue culture (8). Applications of tissue culture to sugarcane improvement have been discussed since 1964 (9), when Hawaiian workers established cultures of various basic and commercial clones. Since then, researchers throughout the world have used various culture techniques to produce plants from numerous tissues of the sugarcane plant (including internode tissue, growing point, immature leaves and flowers, anthers, and true seed) to induce genetic change and possibly improve the performance of a particular variety.

History of tissue culture research at Houma

Tissue culture research has been conducted at our laboratory since the early 1980's in work begun by Dr. J. E. Irvine, then Research Plant Physiologist, who studied persistence of induced variation (5) and transmission of sugarcane mosaic virus (6) in cultured plants. Drs. W. H. White, Research Entomologist, and J. E. Irvine studied resistance to sugarcane borer in tissue culture plants of CP 74-383 (10). Presently, Dr. M. P. Grisham, Research Plant Pathologist, routinely produces disease-free plants through tissue culture to study rate of spread of sugarcane mosaic virus and ratoon stunting disease in the field; and the infection process of sugarcane smut (4).

Tissue culture procedure

One of our procedures for plant tissue culture is described below. Typically, small pieces of immature leaf tissue about 1/2" above the growing point are placed in the dark on a growth medium containing nutrients and a growth stimulating chemical, 2, 4-D. At very low concentrations, 2, 4-D causes the cells of the leaf tissue to grow into a seemingly unorganized mass called a callus (Fig. 1). After several months of growth the callus is transferred to the light onto another medium containing hormones to cause shoot formation (Fig. 2). The shoots are subsequently placed onto a third medium containing a high level of sucrose to cause root formation. All procedures to this point must be done under sterile conditions to prevent growth of fungi and bacteria on the media. Once roots form, plants can be grown in a greenhouse prior to field transplanting.

Potential value of tissue culture

Tissue culture offers the potential for improving undesirable characters, such as disease susceptibility or low sucrose concentration, in otherwise desirable varieties. Genetic variation (if any) present in cultured plants may be due to activation or mutation of genes in the original tissue (8). Abnormal plants are frequently produced by some

(Continued on page 17)

Succession Cane in Louisiana

Ray Ricaud and Allen Arceneaux
Agronomy Department
Louisiana Agricultural Experiment Station

Succession planting is a common practice in most sugarcane producing areas of the world. It is a practice in Louisiana to leave the land fallow for one growing season between cane cycles to control weeds and prepare land for planting. However, fallow land is unproductive and costly to maintain. The needs for a fallow year to prepare land for planting are less now with the availability of better herbicides and precision leveled land. The feasibility of succession planting on a limited acreage during the harvest season has increased with the use of more efficient mechanical planters and 2-row harvesters.

Previous work indicated that succession cane generally produces less yield than fallow planted cane. This is probably due to a decrease in available soil nutrients and an increase in soil disease and insect populations during the previous crop cycle (1, 2). Also, poor land preparation to succession plant immediately after harvesting a crop could reduce yields.

Several experiments have been conducted since 1983 to assess methods of seedbed preparation and the possible needs for fertilizer and soil pesticides in succession cane. Various operations in land preparation were evaluated and the following method was adopted for planting succession cane. After harvesting a crop, the existing rows were shaved and roto-tilled to destroy the old cane stubbles, subsoiled to reduce soil compaction, rebuilt with disk choppers, culti-packed and furrowed for planting. The planting was done in a normal manner. The preparation of existing rows conserves soil moisture and requires less time than redrawing rows.

Results from preliminary fertilizer experiments (3) indicated that the fertilizer needs in succession cane are greater than in fallow planted cane. A fall application of fertilizer in the planting furrow in addition to the recommended spring application increased yields of succession cane. The fall fertilizer rate tested was a 90-90-90 lbs./A of N-P_2O_5-K_2O. Higher than recommended rates of fertilizer in the spring without the fall fertilizer did not increase cane yield.

In a more recent experiment, the effects of soil pesticides and fall applied fertilizer on yield were measured during a 3-year cane cycle. The pesticides tested were Ridomil fungicide at one pint/A. and Furadan insecticide at 10 lbs./A. The pesticides were applied in the planting furrow and in the off-bar furrows each crop year. The fall fertilizer tested was 90-90-90 lbs./A of N-P_2O_5-K_2O applied in the planting furrow. A recommended fertilizer rate was applied to all plots each spring. The pesticides were tested in fallow and succession cane and the fall fertilizer was tested only in succession cane.

The results from this experiment indicated that Ridomil did not increase cane yield. The Furadan increased the 3-crop average yield 5.6% in fallow cane and 7.6% in succession cane without fall fertilizer. The yield increases from Furadan were not significant where fall fertilizer was applied. The fall fertilizer

(Continued on page 22)

PLANTING IS YOUR BUSINESS

OUR BUSINESS IS YOUR PLANNING
AND HOW YOU GROW FINANCIALLY

A. A. HARMON & CO.
(A Corporation of Certified Public Accountants)
Professionals in Planning for:

Cash Flow	Accounting	Taxes
Retirement	Computerization	Estates

311 Baronne Street, New Orleans, Louisiana 70112
Call collect — Glenn V. Weick or David M. Bassemier
(504) 586-0581

PATRONIZE

THE

ADVERTISERS

WHO

PATRONIZE

THE

SUGAR

BULLETIN

For efficiency & Accuracy in Precision grading Consider the purchase of a

Lazerplane
by
Spectra-Physics

- Shorten your completion time
- reduce manhours per project
- easy to operate
- Eliminates costly overcutting

contact

ALLEE, ALLEE & ALLEN, Agent
P.O. BOX 108
ST. JAMES, LA. 70086
504/265-3965

Bristol-Myers Squibb Company

News Release

SUGAR-SWEETENED SOFT DRINKS COULD LEAD TO BETTER NUTRITIONAL CHOICES BY CHILDREN

[News from the 10th Annual Bristol-Myers Squibb/ Mead Johnson Symposium on Nutrition Research Toronto, Canada, October 10-11]

TORONTO, Oct. 10 — Research probing the effects of body and brain chemistry on appetite indicates that children who consume a sugar-sweetened soft drink, one to two hours before a main meal, may naturally choose more nutritious foods at mealtime, according to a paper presented at the 10th annual Bristol-Myers Squibb/Mead Johnson Symposium on Nutrition Research.

The findings, reported by Harvey Anderson Ph.D., professor and chairman, Department of Nutritional Sciences, University of Toronto Faculty of Medicine, showed that sweeteners are useful tools in studying normal human appetite responses in children.

Working with different groups of youngsters, Dr. Anderson and his research team provided children with a standardized breakfast at 8:30 a.m. At 11:30, the group was divided into segments receiving 0, 45, and 90 grams of sugar in the form of a soft drink. Lunch followed at noon.

Dr. Anderson's study found that children who did not have a soft drink, consumed much of their lunchtime calories in the form of cookies rather than more nutritional foods. Conversely, children who had the mid-morning soft drink chose better foods at lunchtime. Mealtime cookie consumption decreased as the pre-lunch sugar load increased.

"This is an area of investigation that represents a frontier for nutritional sciences," Dr. Anderson said. "When it comes to children, we have absolutely no information on appetite regulation."

Dr. Anderson added that this research raises a fundamental question: "When a parent says: 'Don't have a soft drink; you'll spoil your appetite.' Is that correct? We're not sure what the answer is. The medical literature doesn't tell us."

Dr. Anderson believes the hormone norepinepherine is involved in this reaction to sugar in what is known medically as a "cephalic phase response."

The annual Bristol-Myers Squibb/Mead Johnson Symposium on Nutrition Research was the largest event of its kind for physicians and clinical scientists. This year 58 presenters participated and over 100 other professionals attended.

Contact:

Sharon Padua
Bozell Public Relations
75 Rockefeller Plaza
New York, NY 10019
(212) 484-7415

Francine Gingras
Bristol-Myers Squibb
345 Park Avenue
New York, NY 10154
(212) 546-4616

Tissue Culture Research at Houma

(Continued from page 13)

varieties, while for no apparent reason other varieties seem to be relatively stable in culture and produce few abnormal plants. Thus, each sugarcane variety is a distinct individual which may or may not respond as anticipated to tissue culture.

Using the sterile techniques of tissue culture, large quantities of disease-free seed cane can be produced. A private firm is currently using this technology to produce commercial varieties for sale to Louisiana growers, (1) i.e., the Kleentek® varieties CP 65-357KT (7), CP 70-321KT, CP 72-370KT, and CP 74-383KT, showing that tissue culture is no longer simply experimental.

Contributions of dedicated research funding to tissue culture research

The American Sugar Cane League recently helped fund renovations to our tissue culture facility with two grants totaling $26,031. Projects which have been or are currently being conducted in the renovated facilities are:

1. Callus initiation and plant production from true seed of sugarcane, using seed of experimental varieties CP 67-412, CP 72-355, and CP 81-311 (2);
2. Variability among plants produced from callus of true seed of CP 72-355;
3. Rates of root and shoot production in cultures of sugarcane varieties CP 65-357 and CP 70-321 (3);
4. Variability of sucrose in callus-derived plants of low sucrose experimental varieties CP 83-607, CP 86-936, CP 86-945, LCP 83-137, LCP 86-936, LCP 87-3, and the check variety CP 74-383; and
5. Comparison of conventional and tissue culture production techniques on variability of CP 74-383.

Conclusions

Tissue culture is a valuable tool in the plant breeder's arsenal, but should be considered secondary to conventional breeding as a means for variety development. Present studies should further our understanding of culture techniques, mechanisms of disease spread, and applicability of tissue culture to improving existing varieties.

References

1. *Anderlini, T.A. and S.J. Kostka.* 1986. Initial yield responses of Kleentek® tissue culture produced seed cane in Louisiana. Proc. ISSCT. 19:391-401.
2. *Burner, D.M.* 1989. Plant proliferation from callus of sugarcane seed. Proc. Inter-American Sugar Cane Seminars 10:36.
3. *Burner, D.M. AND M.P. Grisham.* 1989. Effect of carbon source on *in vitro* tiller and root proliferation of sugarcane. Agron. Abstr. 81:174.
4. *Grisham, M.P.* 1987. Inoculation of uprights and tissue-culture plantlets of sugarcane with teliospores, sporidia, or mycelium of *Ustilago scitaminea.* Sugar y Azucar 82(6):24.
5. *Irvine, J.E.* 1984. The frequency of marker changes in sugarcane plants regenerated from callus culture. Plant Cell Tiss. Org. Cult. 3:201-209.

(Continued on page 18)

Tissue Culture Research at Houma

(Continued from page 17)

6. *Irvine, J.E. and G.T.A. Benda.* 1985 Sugarcane mosaic virus in plantlets regenerated from diseased leaf tissue. Plant Cell Tiss. Org. Cult. 5:101-106.
7. *Jackson, W., H. Waguespack, Jr., C. Richard, D. Garrison, and W.D. Lester.* 1989. CP 65-357 Kleentek® tests in Louisiana: 1985-1988. Sugar y Azucar 84(6):30.
8. *Larkin, P.J. and W.R. Scowcroft.* 1981. Somaclonal variation — a novel source of variability from cell cultures for plant improvement. Theor. Appl. Genet. 60:197-214.
9. *Nickell, L.G.* 1964. Tissue and cell cultures of sugarcane — another research tool. Hawaiian Planters' Record 57:223-229.
10. *White, W.H. and J.E. Irvine.* 1987. Evaluation of variation in resistance to sugarcane borer (Lepidoptera: Pyralidae) in a population of sugarcane derived from tissue culture. J. Econ. Entomol. 80:182-184.

List of Figures

Figure 1. Callus of Sugarcane Tissue

Figure 2: Sugarcane Plants Developing from Callus

(See Figures page 19)

Tell Them
You Saw It In
THE
SUGAR BULLETIN

GOODYEAR

GOODYEAR TIRES FOR YOUR CAR, TRUCK, FARM OR OFF HWY. EQUIPMENT

- 24 HR. ROAD SERVICE
- COMPLETE AUTOMOTIVE CERTIFIED SERVICE
- TRUCK TIRE BALANCE AND ALIGNMENT

NOBODY FITS YOU LIKE GOODYEAR

SPECIAL
SURE-GRIP TD-8

SUPER TRACTION • SUPER STRENGTH

GENERAL ELECTRIC
AUTHORIZED DEALER

7:30 AM - 6:00 PM MON. - FRI.
7:30 AM - 1:00 PM SAT
1203 ST. PATRICK HWY
THIBODAUX

PIT STOP
YOUR ON FARM SERVICE SPECIALIST

GOODYEAR AUTO SERVICE CENTER
1-800-256-1269 (504) 447-2696

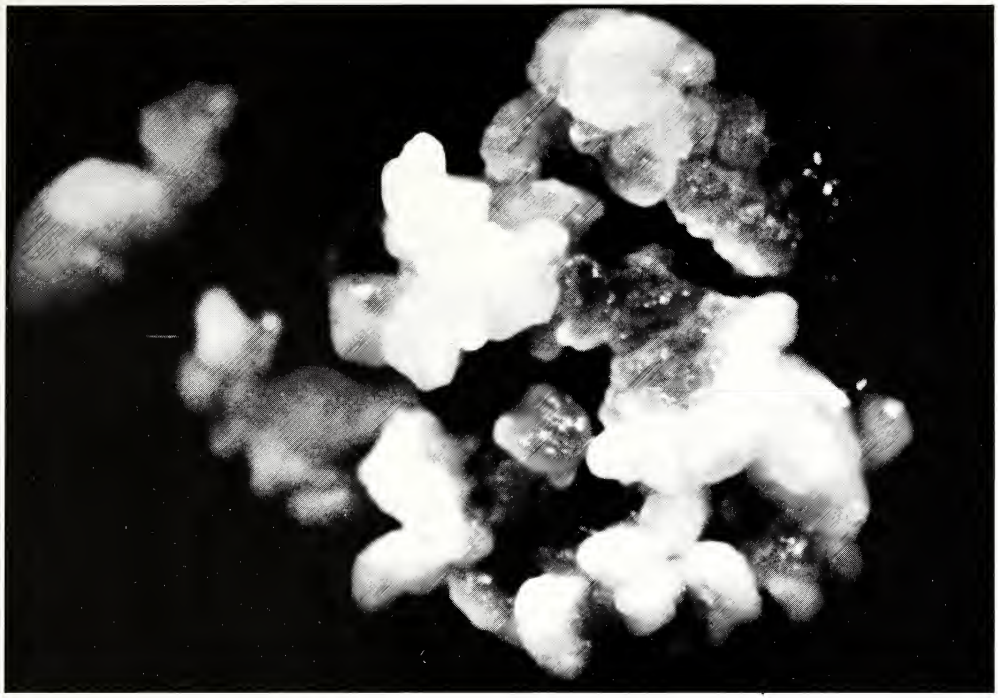


Figure 1. Callus of Sugarcane Tissue

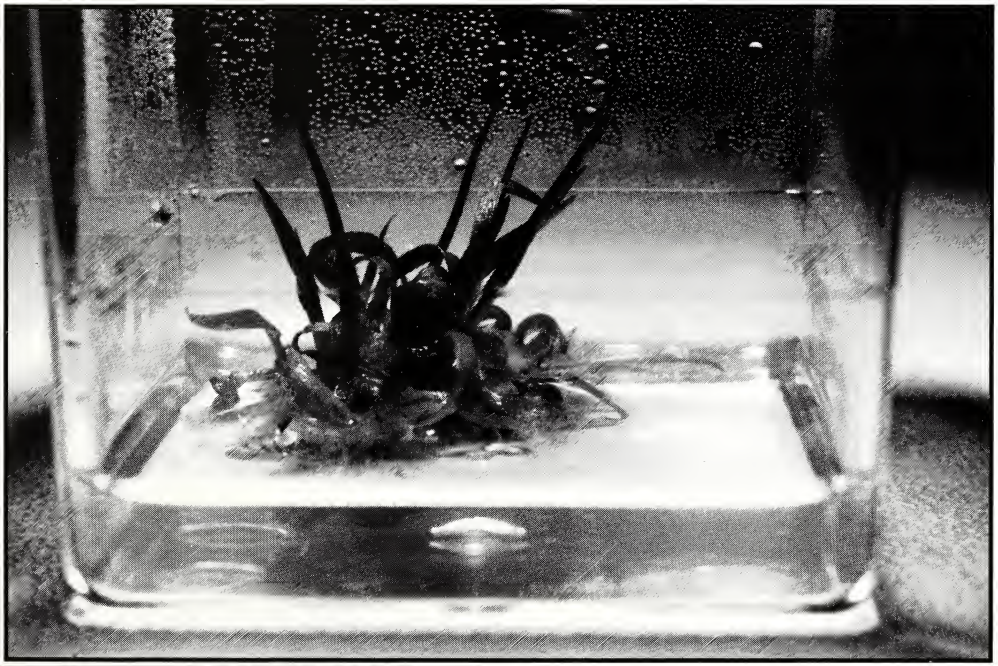


Figure 2. Sugarcane Plants Developing from Callus.

WASHINGTON UPDATE

(Continued from page 6)

Senate Budget Committees to be incorporated, without change, into budget reconciliation bills for floor action by both Chambers. At press time, the House and Senate had passed their versions of deficit reduction legislation and were meeting in conference to try and reconcile major differences in the two bills. President Bush said he could not accept the House version but that the Senate bill would be more acceptable. The President also indicated he would sign another stopgap funding bill to keep the government running for another week past the current October 19 expiration date if he felt Congress was making real progress in reaching an agreement he could support.

USDA ANNOUNCES 1990-CROP SUGAR LOAN RATES

The U.S. Department of Agriculture announced October 1 that the national (weighted average) price support loan rates for the 1990 crop of domestically grown sugarcane and sugarbeets will be 18 cents per pound for raw cane sugar and 21.93 cents per pound for refined beet sugar. These loan rates have been adjusted to reflect the processing location of the sugar offered as collateral for a price support loan.

The processing regions and applicable 1990 regional crop loan rates for cane sugar, raw value, are as follows, except for sugar processed in Hawaii or Puerto Rico but placed under loan on the U.S. mainland, the applicable loan rate shall be 17.75 cents per pound:

Region	Cents per pound raw sugar value
Florida	17.95
Louisiana	18.44
Texas	18.25
Hawaii	17.66
Puerto Rico	18.20

The actual loan amounts paid to producers, however, will be reduced by 1.4% as they have for the last two years due to the sequester amount (amount over budget) under the Gramm-Rudman deficit reduction legislation.

1990/91 SUGAR TARIFF-RATE QUOTA SHIPPING PATTERNS

The U.S. Department of Agriculture announced October 4 shipping patterns for the 39 countries authorized to export sugar to the U.S. under the first tier, or minimum tariff allocation during the 1990/91 sugar import quota period (October 1, 1990 to September 30, 1991). The schedule sets a maximum amount of sugar which can be shipped within a set time period, but authorized countries are under no obligation to ship any sugar at all within the designated time period.

For the top four exporters, Australia, Brazil, the Dominican Republic, and the Philippines, up to 25 percent of their 1990/91 allocation may be shipped each calendar quarter, as well as any sugar not shipped in the previous quarter(s).

The next four largest exporters, Argentina, Guatemala, Panama and Peru, will be allowed to ship up to 50 percent of their authorized imports within the first six months of the quota year (October 1 - March 31), and the remaining 50 percent (plus any unshipped sugar from the previous period) in the last six months (April 1 - September 30).

The remaining 31 countries may ship their entire sugar import quota allocation at any time.

MARKET STABILIZATION PRICE

Reportedly, USDA has decided not to announce a Market Stabilization Price (MSP) at this time, although it has

(Continued on page 21)

WASHINGTON UPDATE

(Continued from page 20)

done so with each new fiscal year for nearly a decade. USDA feels they have no legal obligation to change the MSP in the new fiscal year and that the previous year's rate (21.95 cents/pound) may continue at the same level for an indefinite period of time. Apparently, USDA hopes to reduce the significance of the MSP.

WETLANDS RESTRICTIONS LIFTED ON CROPLANDS

The Corps of Engineers announced that areas that are currently in agricultural crop production, known as "prior converted wetlands" will not be subject to Section 404 of the Clean Water Act. The ruling clarifies "normal circumstances" to include cropping activity. This land is defined by the Soil Conservation Service as "wetlands which were both manipulated and cropped before December 23, 1985 to extent that they no longer exhibit important wetland values."

Previous regulations required a farmer to obtain a Section 404 permit from the Corps of Engineers to enable him to drain or otherwise physically alter his land to remove excess water from the land. These requirements have caused many difficulties for farmers with prior converted cropland. Croplands affected are those inundated for no more than 14 consecutive days during growing season and those which do not contain pothole or playa wetlands. However, farm lands inundated 15 days or more or which contain potholes or playas are considered wetlands and still may be subject to Section 404 permit requirements.

OCTOBER CROP PRODUCTION REPORT

According to USDA's October Crop Production Report, sugarcane production is forecast at 25.7 million tons, the lowest since the 1984 harvest. The forecast is 4 percent above the September 1 estimate but 13 percent below last year's output. Nationally, acreage, at 720,000 acres, is down 15 percent from a year ago. The yield forecast, at 35.7 tons per acre, is 1.2 tons higher than last year. Louisiana's output is expected to be sharply lower than last year which is partially offset with larger crops expected in Florida, Hawaii and Texas.

Sugarbeet production is forecast at 27.1 million tons, down 1 percent from the September 1 forecast but 8 percent above last year's harvest. The change from last month's forecast reflects a reduced yield outlook in North Dakota. The increase from a year ago is the combined result of higher yields and a 6 percent increase in acreage. Yields are expected to average 19.8 tons per acre nationally, compared with 19.4 tons in 1989. Production is expected to be up in all states except California and Colorado.

SUGAR BULLETIN
WANT ADS
GET RESULTS

THE SUGAR BULLETIN

206 E. Bayou Road
Thibodaux, LA. 70301

Phone:
(504) 448-3707

increased yield more in plant cane than stubble cane averaging 5.9 T/A or 18.7% per year for the three crops. The yields were higher in succession cane with the use of fall fertilizer than fallow cane without fall fertilizer. The 90-90-90 rate of fall fertilizer was tested to establish the need for fertilizer at planting time, but it may be too high to produce the most economic yield. Experiments are continuing to determine the optimum rates of fall and spring applications of fertilizer in succession cane.

Generally, the research so far indicates that succession cane can produce yields comparable to fallow planted cane. However, succession cane requires special care in land preparation, fertilization at planting time, a good chemical weed control program and good farm management practices to produce acceptable yields. It is better suited for planting on well drained sandy soils on farms with limited acreage and a low weed pressure.

Although succession planting is not recommended to replace fallow planting, some growers are using the practice to increase cane acreage on their more productive sandy soils. Also, succession planting could be useful on some farms to replant land with poor cane stands and to maintain a desirable ratio of plant, first and second stubble cane.

Succession cane has the potential to increase the efficiency of cane production in Louisiana. More research is needed to determine the optimum fertilization and cultural practices to produce maximum economical yields.

References Cited

1. *Golden, L. E. 1975.* The effect of sugarcane production on nutrient contents of Mhoon and Jeanerette silt loams. La. Agr. Exp. Sta. bull. 685.
2. *Ricaud, R. and A. Arceneaux.* 1986. Some factors affecting ratoon cane yield and longevity in Louisiana. Proc. Inter. Soc. Sugar Cane Tech. 19:18-24.
3. *Ricaud, R. and A. Arceneaux.* 1988. Fertilizer needs for succession planted sugarcane. Jour. Am. Soc. Sugar Cane Tech. 8:32-37.

FREE CALL
1-800-738-2263

Want to Buy
Sugar Mill Equipment

1 Evaporator, 10,000 to 15,000 SFHS
Four Centrifuges — Western State 37'' x 30''
Four Centrifuges — Western State Automatic 40''x36''
One Boiler Feed Pump — 300 GPM with TEFC Motor
One Electric Motor — 200 HP, 1200 RPM, 44OV/60C/3, Continuous Duty

CANE TRACTOR PARTS
Route 1, Box 319-T
Jeanerette, LA 70544
(318) 276-3453

Ken Squires
Pilot

PENN-TEX
Helicopters, Inc.
"Precision Chemical Control"
318-278-2174 **318-728-4272**

 (Continued from page 12)

the bark or bast fibre, constituting about 20% of the stalk dry weight, has been used. This requires a rather expensive process for separation of the bast fiber from the remaining part of the stalk consisting of rather short woody fibers and some pith. This is done with simple and labor intensive equipment in certain parts of Africa and Asia. A recent United Nations report describes some case studies on kenaf and similar crops and draws the general conclusion that the crop is more suited to the low intensity agriculture of developing countries. Particular problems cited are its relatively low yield, lack of continuity of supply and therefore storage requirements and generally higher production expenses than competing crops.

For paper production, the choice of pulping technique depends upon the quality of paper desired and may involve only the bast (long) fibers or the whole plant with both the bast and the woody material. All of these options have been studied and the main drawbacks with kenaf pulp are the lower production tonnage due to poor drainage on the paper machine and the higher cost of chemicals than for other fibers. Another possible complication with mechanically harvested kenaf is the higher dirt content of the fiber and associated higher processing costs. Forage type harvesters seem to be the preferred method for, with the disintegrated material being baled for shipment. In some areas the material is sun dried but this will be difficult in Louisiana.

Milling tests on kenaf grown at St. Gabriel were performed at the Audubon Sugar Factory in 1967 under the supervision of John Seip. Whole stalk kenaf was passed through the sample mill, the screw press and the milling tandem. The sample mill and screw press presented no problem, but the following is taken from the report on the run of the tandem —

> "Due to mill chokes, the run on the Squire milling tandem was not completed. — The combined action of the knives and the mills was to effect a separation of the bast bark and the woody portion of the stalk. The bast bark leaving the mills was observed to be in long strips — often the length of the original stalk. On the contrary, the woody portion was thoroughly disintegrated to such a degree that the mills had difficulty gripping the fine particles. The long lengths of bast bark balled up under the scrapers. — The effect of the accumulation of bark under the scrapers was to raise the scrapers off the rolls. Subsequently the bark and woody material imbedded into the grooves. Numerous mill stops were necessary — . The problem of milling kenaf in conventional sugar cane equipment appears to lie in the completely different nature of the fibrous material. — It is evident that extraction with conventional sugar cane milling equipment must be preceded by adequate preparation. — In view of these difficulties, the question arises as to whether it is absolutely necessary to dewater the kenaf prior to pulping or storage."

From the mill runs the following data on kenaf composition was obtained: fibre — 25-30%; soluble solids — 7-8%; moisture 65-75%. Juice of about 10 brix was extracted but no data on composition is given. Very limited storage data was produced in this study.

Many of these ideas seem to have a natural cycle of about a generation. The question that must be asked is whether the reason for the failure to commercialize kenaf in the sixties still apply today.

Commercial Members of the
AMERICAN SUGAR CANE LEAGUE
OF THE U.S.A., INC.

ASSUMPTION BANK & TRUST CO.
P.O. Box 398 Napoleonville, LA 70390

THE BARTLETT COMPANY
Chemical Brokers
4955 River Road
P.O. Box 10710
Jefferson, LA 70181

THE CROPMATE COMPANY
Fertilizer Region
P.O. Box 28 Thibodaux, LA 70302

CAMECO INDUSTRIES, INC.
P.O. Box 968 Thibodaux, LA 70301

FIRST COMMERCIAL BANK
521 Main St. Franklin, LA 70538

DUPLANTIER, HRAPMANN,
HOGAN, & MAHER
Certified Public Accountants
821 Gravier Suite 1300
New Orleans, Louisiana 70112

ESTES REFRACTORY
P.O. Box 94 Jeanerette, LA 70544

THE FIRST NATIONAL BANK
IN DONALDSONVILLE
P.O. BOX 108 Donaldsonville, LA 70346

F. C. SCHAFFER & ASSOCIATES, INC.
1020 Florida Blvd.
Baton Rouge, LA 70802

GULF ENGINEERS & CONSULTANTS, INC.
535 Main Street
Baton Rouge, LA 70802

WESTWAY TRADING CORP.
228 St. Charles Ave., Suite 700
New Orleans, LA 70130

NADLER, INC.
P.O. Box 359
Plaquemine, LA 70765

NATIONAL BANK
FOR COOPERATIVES
Jackson Region
1800E, County Line Road
P.O. Box 16099
Jackson, MS 39236

OUACHITA FERTILIZER
Route 7, Box 49-F
New Iberia, LA 70560

DRAVO LIME COMPANY
Pelican State Division
12797 Scenic Highway
Baton Rouge, LA 70807

SELF INSURANCE ADMINISTRATORS
P.O. Box 11509
New Iberia, LA 70562-1509
A Member Company of Huval Insurance Group

FIRST SOUTH PCA
P.O. Box 667 Thibodaux, LA 70302
P.O. Box 10908 New Iberia, LA 70562

STANDARD SUPPLY & HARDWARE
CO., INC.
P.O. Box 60620 New Orleans, LA 70160

ST. MARY BANK & TRUST CO.
Franklin, LA 70538

LOUISIANA CANE MFG., INC.
P.O. Box 71 Thibodaux, LA 70301

WHITNEY NATIONAL BANK
228 St. Charles Avenue
New Orleans, LA 70130

RAYNE STATE BANK
AND TRUST COMPANY
P.O. Box 99
Duson, LA. 70529

3-D CHEMICAL, INC.
P.O. Box 607
St. Martinville, LA. 70582

e Sugar Bulletin
E. Bayou Rd.
odaux, La. 70301

dress Correction Requested)

BULK RATE
U.S. POSTAGE
PAID
PERMIT NO. 43
Thibodaux, La.

SERIALS DEPT.
LOUISIANA STATE UNIV.
LIBRARY
BATON ROUGE, LA 70803

The Sugar Bulletin

OFFICIAL BULLETIN OF THE AMERICAN SUGAR CANE LEAGUE OF THE U.S.A.

Up Front With The League
by P. J. deGravelles, Jr. 5
1990 High Yield Award Winners 6
Washington Update With Don Wallace 8
Farm Notes by Dr. Charley Richard 10
The Baton Rouge Line
by Tom and Linda Spradley 11
In The Factory by Stephen J. Clarke 12

We stand for the encouragement of Home Industries as against Foreign Competition

Vol. 69 — No. 3 DECEMBER 1, 1990

The Sugar Bulletin

The Official Organ of the American Sugar Cane League of the U.S.A., Inc.

P. J. deGravelles, Jr., Editor and General Manager
Charles A. Richard, Ph.D., Director of Research and Field Representative
Windell R. Jackson, Senior Agronomist
Herman Waguespack, Jr., Agronomist
John Constant, Business Manager
Nannette B. Nickens, Office Secretary
Paul G. Borron, III, Legal Counsel

Washington Representative:
Wallace and Edwards, Inc.
1150 Connecticut Avenue, N.W.
Suite 507
Washington, D.C. 20036
Phone: (202) 331-4331

Baton Rouge Representative:
Spradley and Spradley
6216 Riverbend Boulevard
Baton Rouge, LA 70820
Phone: (504) 766-1359

Editorial and Executive Office:
206 E. Bayou Rd., Thibodaux, LA. 70301
Phone: (504) 448-3707

OFFICERS AND MEMBERS OF THE BOARD OF DIRECTORS OF THE AMERICAN SUGAR CANE LEAGUE

William S. Patout, III, Jeanerette, LA
President
Dr. Daniel Viator, Youngsville, LA
1st Vice-President
P. J. "Pete" deGravelles, Franklin, LA
Vice President — General Manager
Don Wallace, Washington, DC
Vice President — Government Relations
Patrick Cancienne, Belle Rose, LA
Treasurer
Irving Legendre, Jr., Thibodaux, LA
Secretary

Pat Accardo, Franklin, LA
Bryan Allain, Jeanerette, LA
J. G. Beaud, Jr., New Roads, LA
Bert Beyt, Jeanerette, LA
Ramon E. Billeaud, New Orleans, LA
Felix Blanchard, New Iberia, LA
Ronald Blanchard, Napoleonville, LA
Neal Bolton, St. James, LA
Joseph E. Boudreaux, Thibodaux, LA
Fred Y. Clark, Franklin, LA
Lawrence Dugas, New Iberia, LA
Dan Duplantis, Raceland, LA
Paul Ellender, Bourg, LA
John F. Gay, Plaquemine, LA
Ronald Gonsoulin, New Iberia, LA
Mike Graugnard, Edgard, LA
Warren Harang, III, Donaldsonville, LA
Roddy Hulett, St. Martinville, LA
Bobby Judice, Franklin, LA
Kenneth Kahao, Port Allen, LA
Denis Lanaux, Killona, LA
Melvin Landry, New Iberia, LA
D. C. Mattingly, Paincourtville, LA
Jerry McKee, Thibodaux, LA
Kenneth Peltier, Thibodaux, LA
R. L. Roane, Jr., Jeanerette, LA
Howard Robichaux, Labadieville, LA
Raphael Rodriguez, Franklin, LA
Mel Schudmak, White Castle, LA
Frank Sotile, Donaldsonville, LA
David Stewart, Lakeland, LA
Roland Talbot, Thibodaux, LA
Jackie Theriot, Breaux Bridge, LA
James Thibaut, Donaldsonville, LA
Glenn Timmons, Brusly, LA
Eugene Woods, Paincourtville, LA

HONORARY MEMBERS

Joseph G. Beaud, Sr., New Roads, LA
Charles Billeaud, Broussard, LA
Paul G. Borron, Jr., Plaquemine, LA
Jerry L. Dickson, New Orleans, LA
Gilbert J. Durbin, New Orleans, LA
F. Evans Farwell, New Orleans, LA
J. N. Foret, Jr., Thibodaux, La.
Andrew Gay, Plaquemine, LA
F. A. Graugnard, St. James, LA
Warren J. Harang, Jr., Thibodaux, LA
Lloyd Lauden, New Orleans, LA
E. W. McNeil, Brusly, LA
J. Randolph Roane, Jeanerette, LA
Charles C. Savoie, Belle Rose, LA
Edward T. Supple, Bayou Goula, LA
E. Berkshire Terrill, Brusly, LA
John Thibaut, Napoleonville, LA
M. V. Yarbrough, Fort Smith, Ark.

POSTMASTER: Send address changes to THE SUGAR BULLETIN, 206 E. BAYOU RD., THIBODAUX, LA. 70301.

MAXXUM™

Forward to reverse: No brake, no clutch, no kidding.

It's true. New Case International MAXXUM tractors feature a shuttle shift to take you from forward to reverse without clutching. Reverse speeds are 20 percent faster than forward, perfect for loader work. And the shuttle shift is standard on all MAXXUM tractors.

The shuttle shift is just one of many reasons to own a MAXXUM tractor. Others include: choice of fully synchronized or powershift transmissions, with 16 forward and 12 reverse speeds, an eight-speed creeper option, choice of cab, custom canopy or foldable ROPS, and three horsepower selections, 77, 86 and 94 PTO (57, 64 and 70kW).

And all three models are backed by the best warranty* in the business five years or 5,000 hours, whichever occurs first. Come in to see the MAXXUM line of tractors today.

* Excluding tires which are covered by their own manufacturer' warranties. A $200 deductible applies to each repair after the first year.

*JI Case Company 1989

Switzer Sales and Service
Jeanerette, LA
(318) 276-6384

Gremillion's, Inc.
New Roads, LA
(504) 638-6347

Lanier Int'l. Inc.
Abbeville, LA
(318) 893-1988

Baton Rouge, LA
(504) 357-6453

Lemann's Farm Supply Inc.
Thibodaux, LA
(504) 447-3776

Donaldsonville, LA
(504)473-7927

caseih

THIS ISSUE IS IN MEMORY OF

ANDREW WOODS DYKERS

Mr. Andrew Woods Dykers, former executive secretary for the Louisiana Sugar Exchange, died Thursday, October 25, 1990 at Southern Baptist Hospital in New Orleans. He was 88. Mr. Dykers, a life-long resident of New Orleans, was the contributing editor of The Sugar Bulletin, published by the American Sugar Cane League, which was founded by his father, Reginald Dykers. He is survived by his wife, Miriam Kernan Dykers; a son, Andrew W. Dykers, Jr. of Richmond, Va.; a daughter, Dorothy Dykers Baker of Dallas, Tx.; eight grandchildren and six great-grandchildren. A memorial service was held on Saturday, October 27 at the First United Methodist Church, New Orleans, La. His body was donated to science.

UP FRONT WITH THE LEAGUE

By P. J. deGravelles, Jr.

Editor's Note: *Much of the history and culture of South Louisiana is directly related to the sugar industry. The following guest editorial by Anne Timmons of Brusly, LA tells how the old Poplar Grove Plantation complex in West Baton Rouge Parish will be used to maintain this rich tradition.*

PLANTATION LIGHTS: CHRISTMAS ON POPLAR GROVE

"Plantation Lights: Christmas on Poplar Grove" is destined to become a holiday tradition at the old Poplar Grove Plantation complex in West Baton Rouge Parish. Thousands of shimmering white lights will create a light-drawing of the tenant houses lining Scale House Road; also illuminated will be the gears and steam engine that remain intact in the century-old sugar mill.

Area gospel choirs will perform nightly — weather permitting — on the grounds of the Poplar Grove Chapel Baptist Church, located at the end of the half mile drive-through event. "Plantation Lights" will be presented December 14 through 23 from 5:00 to 9:00 p.m. The cost is $1.00 per car.

Christmas decorations are part of the joy of the holiday season and experiencing them in this unique historic setting will be unforgettable. However, "Plantation Lights: Christmas on Poplar Grove" has a more serious and far-reaching purpose.

The Foundation for Historical Louisiana and the West Baton Rouge Development Corporation, with the consent of property-owner Premier Bank, are launching a fund-raising drive to preserve Poplar Grove for future generations. Members of the preservation community, as well as state tourism experts and economic development leaders, have encouraged the Foundation in recent months to protect this important historical site, which dates back to the 1870's, for educational and tourism purposes.

Dr. Noel Gray, distinguished professor emeritus from Southern University's Department of History, stated that, "Here, in West Baton Rouge Parish, literally in the shadow of the state capitol, stands a living testimonial of what life was like on a Louisiana sugar plantation in post civil war and early twentieth century Louisiana." According to Suzanne Turner, associate professor in the LSU School of Landscape Architecture, "There are very few sugar cane sites in the state that have the visual unity and power that Poplar Grove has."

"Plantation Lights: Christmas on Poplar Grove" officially inaugurates this preservation venture and sets the fund-raising gears in motion. Major underwriter Gulf States Utilities Company, along with many dedicated volunteers interested in preserving our state's heritage, are working together to produce this 10-day event. The $1.00 per car charge to drive through the planta-

(Continued on page 16)

1990 High Yield Award Winners

STATE'S BEST SUGARCANE GROWERS RECOGNIZED

Farmers harvesting the most pounds per acre last season were honored by the American Sugar Cane League and the Louisiana Cooperative Extension Service September 29 at a luncheon in New Iberia with the presentation of annual sugarcane high-yield awards.

Presiding at the awards luncheon was Dr. Denver T. Loupe, Vice Chancellor of the LSU Agricultural Center and Director of Extension. Awards were presented by William Patout, III, President of the American Sugar Cane League.

The growers were cited for producing the most pounds of sugar per acre last year in their acreage categories in their district. The program is set up with seven acreage groups in each of four districts in Louisiana's Cane Belt. Award recipients for each category are chosen from among growers with farms of similar size and compatible soil and climatic conditions.

Group 1 consists of farms of 5 to 49.9 acres; Group 2 — 50 to 99.9 acres; Group 3 — 100 to 199.9 acres; Group 4 — 200 to 499.9 acres; Group 5 — 500 to 999.9 acres; Group 6 — 1,000 to 2,499.9 acres; and Group 7 — 2,500 acres and more.

Producers honored at the September 28 event were:

District 1 (Lafayette, St. Martin Parishes) — Group 2, Jody Theriot of St. Martinville, 5,833 pounds of sugar per acre on 54 acres; Group 3, Willie Price of St. Martinville, 5,901 pounds of sugar per acre on 158 acres; Group 4, Raymond Boudreaux of St. Martinville, 6,551 pounds of sugar on 324 acres; Group 5, Chris Latiolais of Parks, 6,947 pounds of sugar per acre on 515 acres; Group 6, Triple V Farm of Youngsville, 6,725 pounds of sugar per acre on 1,805 acres; Group 7, Levert-St. John of St. Martinville, 5,006 pounds of sugar per acre on 2,613 acres. No producer qualified for Group 1.

District 2 (Iberia and St. Mary Parishes) — Group 1, Robert Judice, Jr. of Franklin, 6,693 pounds of sugar per acre on 41 acres; Group 2, Bryan LeJeune of Jeanerette, 6,105 pounds of sugar per acre on 69 acres; Group 3, A & S Farms of Jeanerette, 7,588 pounds of sugar per acre on 162 acres; Group 4, Lane Blanchard of New Iberia, 7,905 pounds of sugar per acre on 216 acres; Group 5, Clement Brothers of Charenton, 7,678 pounds of sugar per acre on 659 acres; and Group 6 — A & M Farm, Inc. of New Iberia, 7,739 pounds of sugar per acre on 1,538 acres. No producer qualified for Group 7.

District 3 (Assumption, Lafourche and Terrebone Parishes) — Group 1, Robert LeBlanc of Belle Rose, 7,418 pounds of sugar per acre on 24 acres; Group 2, Tommy Richard of Raceland, 8,428 pounds of sugar per acre on 48 acres; Group 3, Denis Knoblcoh, Jr. of Raceland, 8,875 pounds of sugar per acre on 153 acres; Group 4, Acosta Brothers of Thibodaux, 8,407 pounds of sugar per acre on 480 acres; Group 5, Bull Run Farms of Labadieville, 8,392 pounds of sugar per acre on 690 acres; Group 6, Godfrey Knight of Schriever, 6,991 pounds of sugar per acre on 1,685 acres; and Group 7, Southcoast Sugars Inc. of Raceland, 6,540 pounds of sugar per acre on 3,858 acres.

District 4 (Ascension, Iberville, Pointe Coupee, St. Charles, St. James, St. John and West Baton

(Continued on page 18)

PLANTING IS YOUR BUSINESS

OUR BUSINESS IS YOUR PLANNING
AND HOW YOU GROW FINANCIALLY

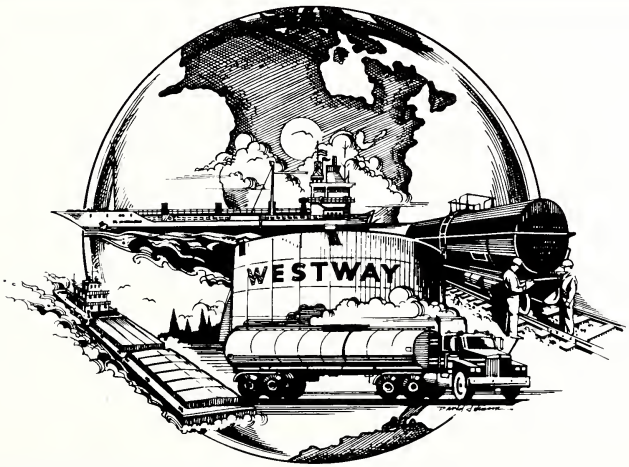
A. A. HARMON & CO.

(A Corporation of Certified Public Accountants)

Professionals in Planning for:

Cash Flow	Accounting	Taxes
Retirement	Computerization	Estates

311 Baronne Street, New Orleans, Louisiana 70112
Call collect — Glenn V. Weick or David M. Bassemier
(504) 586-0581



Westway Trading Corporation is celebrating its 50th year in business as a world leader in the marketing and distribution of molasses and related products. We would like to express our gratitude to our many suppliers, customers and service companies that have worked with us over these many years. Westway Trading Corporation is devoted to further development of established business and expansion into new areas. We very much appreciate your support and look forward to working with you during the next fifty years.

50th Westway TRADING CORPORATION 1940-1990

228 St. Charles Ave., Suite 700, New Orleans, La. 70130, 504-525-9741

WASHINGTON UPDATE WITH DON WALLACE

FARM BILL GETS FINAL APPROVAL

The House and Senate gave their final approval to the new five-year farm bill just prior to adjourning on October 28. At press time, President Bush was still waiting to receive the bill from Congress to sign into law. Although the bill sets agricultural policy through 1995 for farm support, export promotion, nutrition, environmental and agricultural research programs, some House and Senate members have indicated the bill may have to be revised next year depending on the outcome of the GATT negotiations.

As reported in the October BULLETIN, the sugar program: (1) continues sugar loan rate at 18 cents per pound; (2) extends term of loan from 6 to 9 months; (3) requires program to be run at no cost to the government; (4) establishes minimum annual import quota of 1.25 million short tons and allows USDA to impose marketing controls on domestic producers in any year when the quota is expected to fall below that amount; and (5) sets a 200,000 ton sugar-equivalent limit on marketings for crystalline fructose.

In addition, the budget agreement approved by Congress included a one percent non-refundable program service fee (market assessment) on domestically grown cane and beet sugar. The fee will be set at 1% (.18 cents per pound) of the 18-cent average loan rate for raw sugar, and at 1% (.193 cents per pound) of 19.3 cents for refined sugar and will be paid to the Commodity Credit Corporation by the first processor of sugar beets or sugarcane beginning in fiscal 1992 (October 1, 1991), for each of the 1991 through 1995 crop years.

AGRICULTURE COMMITTEE TO SEE CHANGES

With the 1990 election cycle complete, attention will now turn to congressional committee structure. Three House Agriculture Committee members lost their bids for re-election, including Rep. Arlan Stangeland (R-MN), ranking member of the Cotton, Rice and Sugar Subcommittee. Stangeland was also the 5th ranking Republican member on the committee. Rep. Grant (R-FL) and Rep. Dyson (D-MD), new members of the committee, also were defeated in their bids for re-election. Grant, a former Democrat, had switched parties after the 1988 election. In addition, Rep. Schuette (R-MI) will be leaving the committee after failing in his bid for the Senate. There are reports the House Ag Committee may not replace all vacated spots, with the idea of downsizing the committee for the the 102nd Congress.

In the Senate, two vacancies will open up on the Agriculture Committee due to the elections. Senator Boschwitz (R-MN) was the only incumbent Senator defeated in an upset victory by Democrat Paul Wellstone. Senator Wilson (R-CA) was elected governor of California and will have the opportunity to appoint successor to his Senate seat. Although 9 Senators serving on the Agriculture Committee were up for re-election, all but Boschwitz will be returning.

ASA WITHDRAWS SUPPORT FOR U.S. GATT PROPOSAL

The American Sugar Alliance, of which the League is a member, announced October 22 it was withdrawing its support for the weakened U.S.

(Continued on page 9)

WASHINGTON UPDATE

(Continued from page 8)

position in the Uruguay Round of international trade talks, stating that current negotiations would not ensure fair trade for U.S. sugar producers. According to representatives of ASA, the latest proposal submitted to the GATT by the U.S. in October calls for only a partial and inequitable rollback of trade barriers that would likely aggravate current imbalances. Until October 22, the domestic sweetener industry had supported the original U.S. position to eliminate all trade barriers and subsidies worldwide maintaining that the American sweetener industry is efficient and can compete with sugar farmers anywhere in the world, as long as the playing field is level.

The GATT talks are scheduled to end in Brussels in early December following four years of negotiations. However, there is still a great deal of work to be completed in several of the negotiating areas, including agriculture. Secretary of Agriculture Clayton Yeutter has said there is "almost no chance" that the talks will conclude as scheduled in December. There has been very little movement in the agriculture talks since November 10 when the United States and the Cairns Group dismissed the long-awaited European Community proposal as non-negotiable. Yeutter said the farm proposal put forth by the EC to reduce ag subsidies by 30% over 10 years showed no evidence of serious commitment to agriculture reform. The US has proposed reducing domestic crop price supports by 75%over 10 years and agriculture export subsidies by 90%.

CROP PRODUCTION REPORT

In USDA's latest crop production report released November 8, sugarcane production for sugar and seed is forecast at 25.3 million tons, 2 percent less than the October 1 forecast and 14 percent below last year's output. Compared with a year ago, expected production is down 62 percent in Louisiana and 4 percent in Hawaii, but is up 7 percent in Texas and 8 percent in Florida.

Sugarbeet production is forecast at 27.0 million tons, down fractionally from the October forecast but 8 percent above last year's harvest. The increase from a year ago is the combination of higher yields and a 6 percent increase in acreage. Production is expected to be up in all states except California and Minnesota. Details by state are as follows:

(Continued on page 14)

FREE CALL
1-800-738-2263

Want to Buy
Sugar Mill Equipment

1 Evaporator, 10,000 to 15,000 SFHS
Four Centrifuges — Western State 37" x 30"
Four Centrifuges — Western State Automatic 40"x36"
One Boiler Feed Pump — 300 GPM with TEFC Motor
One Electric Motor — 200 HP, 1200 RPM, 44OV/60C/3, Continuous Duty

CANE TRACTOR PARTS
Route 1, Box 319-T
Jeanerette, LA 70544
(318) 276-3453

FARM NOTES By Dr. Charley Richard

CROP AND WEATHER REPORT — SEED QUESTIONNAIRES — HUGH PAUL FANGUY — SPECIAL NOTE

As of this writing, November 15, many growers are already some 35 to 50% into their harvest. The first yield reports have been encouraging from some growers but disappointing from others. Because some growers followed the normal harvest schedule of oldest stubble cut first while other growers started in better cane and are leaving the older scrappy cane until later, it is very difficult to predict what the final yields will be. However, even with the good growth that cane made in September and early October, it is unlikely that this industry could produce much more than 4 million tons of cane. In 1989, this industry ground more than 8.3 million gross tons of cane.

The higher than expected tonnage values from certain fields can best be attributed to higher than predicted stalk weights. The population cannot improve past mid August when millable stalks start to form and smaller shoots die off. The gaps that were there during the summer are still there at harvest time. There is little way to predict stalk weight prior to harvest and it normally comes as a surprise. The better stalk weight in the older stubble fields is certainly not due to an overabundance of water since this industry is now in a lengthy dry period. Many feel that the better weights are due to more sunlight which penetrated the thin leaf canopy and produced either bigger stalks or more dense stalks.

Sugar recoveries have been just as variable as the tonnage reports with averages ranging from 100 to 200 pounds of sugar per ton of cane. Grass has caused the lower sugar numbers in many fields although the cane is certainly less mature this year than it has been in any of the last three years.

What has caused both the tonnage and the sugar to be better in certain areas of the cane belt? No one is certain, but many feel that rains (even minimal rains) at crucial times played a role in achieving the better yields. In many cases the higher tonnage areas are providing the higher sugar per ton yields. The state average at this time appears to be near 180 pounds of sugar per ton and predicting what direction it will go from here is difficult. If this industry can average 180 pounds for the year we could wind up with some 360,000 tons of sugar as compared to the 864,000 produced last year.

Ground conditions at this time are very dry, probably the driest most people can remember. Rainfall at the League Office in Thibodaux has totaled 82% of what it should for the first 10 months of the year. However, this figure does not tell the whole story. Rainfall from January through March was excessive and averaged nearly 150% of normal. Rainfall during April through June was at 83% of normal while rainfall during the July, August, September and October has been only 42% of normal. This reduced rainfall in the last seven months has placed much of the cane belt in a moderate drought status according to records with the Louisiana Office of State Climatology. Forecasts for the next 30 days do not indicate anymore than normal rainfall.

During the last two weeks, some 1 to 5 inches of rain have been recorded

(Continued on page 15)

THE BATON ROUGE LINE

By Tom and Linda Spradley

MEET YOUR LEGISLATOR

This month we continue to introduce you to the legislators that represent you. These representatives have been very supportive of the sugar industry, and we would like for you to get to know them a little better.

REP. TED HAIK has represented the people of Iberia, Vermilion and St. Mary parishes for 12 years in the state legislature.

He attended Catholic High School in New Iberia, and went on to college at the University of Southwestern Louisiana in Lafayette, where he developed an interest in politics and the law. Following his career instincts, he then attended the Loyola School of Law in New Orleans.

After he graduated from law school, he attended the Louisiana National Guard Officer Candidate School and the University of Virginia Military Law Course. After years of service, he is now retired as a Captain from the Louisiana National Guard, Judge Advocates Corps.

During his four terms as a state legislator, Ted has served on the Health and Welfare, Judiciary, and Natural Resources, Civil Law and Procedure, and House Ways and Means committees. He has also been a member of the Governor's Special Task Force on Ports and Harbors, the Judicial Reappointment Task Force, the Governor's Coordinating Council of Services for Children and the Louisiana State Bond Commission.

Ted is married to the former Carol Redmond, and they have four children: Theodore III, Christopher, Eric, and Maureen. He is a partner in the New Iberia law firm of Haik and Minvielle.

SEN. JOE SERVARIO has been a state senator since 1976. He represents Ascension, St. James, and parts of Assumption, Livingston and St. John the Baptist Parishes. Sugar cane is grown in parts of his district, and sugar mills operate here.

Joe graduated from St. Amant High School, and attended Southeastern Louisiana University and Louisiana State University. He is self-employed.

Joe is Chairman of the Senate Labor and Industrial Relations Committee, and serves as a member of the Senate Committees on Natural Resources, Revenue and Fiscal Affairs, and Senate and Governmental Affairs.

For years Joe was one of the most dependently pro-labor votes in the Senate, reflecting the philosophical orientation of his district. However, in recent sessions, he became more open to the business point of view, both as chairman of the Senate Labor and Industrial Relations Committee and on the floor of the upper chamber. In 1987, he steered an unemployment compensation reform bill, which cut benefits and imposed a tax on payrolls to help fund a bailout of the program, through his committee and onto the floor.

Joe is married to the former Bonnie Bruce.

Tell Them You Saw It In
THE SUGAR BULLETIN

IN THE FACTORY

CURRENT RESEARCH AND DEVELOPMENT IN ANOTHER CANE AREA

Stephen J. Clarke
Audubon Sugar Institute
Louisiana Agricultural Experiment Station

Many of the sugar industry publications are of general interest and do not go into much detail of how a particular technology works or what its implications might be. Some annual proceedings of meetings, however, contain a good deal of "hard-core" technology and the 1990 Proceedings of South African Sugar Technologists Association has just arrived. This year there is nothing startlingly new but much information, along with technical details, on improving technologies and approaches to making the industry more competitive. They range from the classical question of mill settings and extraction to automation of pan boiling systems.

Before dealing with the technical aspects, the following is quoted from the opening address —

". . . we have become very capable production managers, salesmen and financiers, but I think there is a great weakness in our research and development activities . . . our input into Agricultural R&D is very favorable at about 1.4% of the gross value of the crop; this compares with Hawaii at 1.3% and Australia at 1.2% (1985). To put our Agricultural R&D costs into perspective, the costs to the industry may be equated to about 15 stalks per ton of cane; probably not much more than the amount that is left in the field, at the loading zone and eaten by wild pigs and monkeys".

The summary data for the most recent crop in South Africa shows that they had a good year, mainly due to the better than usual cane quality. Half the factories achieved extraction in excess of 98%, from both milling tandems and diffusers. Two new diffusers were installed and commissioned. There has been a steady improvement in boiling house work and this is generally linked to better molasses exhaustion rather than to reduced undetermined losses. The latter was about 2%, a slight increase from the previous year but the sucrose lost in molasses fell by about 0.5%.

The industrial A-massecuite exhaustion was 65.7% and is important in producing good quality raw sugar (see later). A new two stage continuous BMA centrifugal has been installed to cure A-massecuite to supply the refinery. Although not yet optimized, the machine worked well. A fully continuous A-station has been set up with magma being fed to a continuous A-pan from which the massecuite flows into the first of two batch pans connected in series. There were no problems with incrustation, the continuous pans being cleaned once a week, while the batch pans were cleaned once a day.

One paper described "Some factors contributing to the improved boiling house performance at Mhulme" by T.B. Dale. The factors included increased A-massecuite exhaustion, use of new centrifugals and decreased volume of A-massecuite. The high crystal recovery

(Continued on page 17)

GOODYEAR

GOODYEAR TIRES FOR YOUR CAR, TRUCK, FARM OR OFF HWY. EQUIPMENT

- 24 HR. ROAD SERVICE
- COMPLETE AUTOMOTIVE CERTIFIED SERVICE
- TRUCK TIRE BALANCE AND ALIGNMENT

NOBODY FITS YOU LIKE GOODYEAR

SPECIAL SURE-GRIP TD-8

SUPER TRACTION • SUPER STRENGTH

GENERAL ELECTRIC AUTHORIZED DEALER

7:30 AM - 6:00 PM MON. - FRI.
7:30 AM - 1:00 PM SAT
1203 ST. PATRICK HWY
THIBODAUX

PIT STOP

YOUR ON FARM SERVICE SPECIALIST

GOODYEAR AUTO SERVICE CENTER

1-800-256-1269 (504) 447-2696

First South Production Credit Association

Farmer Owned Since 1934

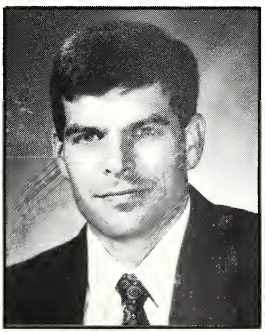
Experienced and Knowledgeable Agricultural Lender

Offices in New Iberia and Thibodaux

Thibodaux

DEAN MARTIN
Loan Officer
(504) 446-9450

Thibodaux



ANDY ANDOLSEK
Loan Officer
(504) 446-9450

New Iberia

PATSY CHAMPAGNE
Loan Officer
(318) 364-0217

WASHINGTON UPDATE

(Continued from page 9)

SUGARBEETS 1/

STATE	AREA HARVESTED		YIELD		PRODUCTION		
	1989	IND 1990	1989	IND 1990	1988	1989	IND 1990
	1,000 ACRES		TONS		1,000 TONS		
CA	169.0	165.0	27.3	27.0	5,300	4,614	4,455
CO	40.0	40.0	22.8	23.0	880	912	920
ID	177.0	187.0	22.8	25.0	4,084	4,038	4,675
MI	150.0	157.0	17.1	20.0	2,393	2,565	3,140
MN	341.0	362.0	16.0	14.5	4,743	5,456	5,249
MT	51.9	55.0	19.9	22.0	1,032	1,033	1,210
NE	62.4	71.6	18.7	20.5	1,319	1,167	1,468
NM	2/	2/	2/	2/	9	2/	2/
ND	180.1	190.0	15.7	15.0	2,580	2,828	2,850
OH	11.9	19.0	16.7	20.0	234	199	380
OR	15.2	16.0	25.7	27.0	376	391	432
TX	35.3	41.0	21.0	23.0	723	743	943
WY	59.3	63.4	19.2	19.7	1,137	1,139	1,249
OTHER 3/	1.6	2.2	27.5	25.9		44	57
U S	1,294.7	1,369.2	19.4	19.7	24,810	25,129	27,028

1/ RELATES TO YEAR OF INTENDED HARVEST EXCEPT FOR OVERWINTERED SPRING PLANTED BEETS IN CA. 2/ INCLUDED IN OTHER STATES TO AVOID DISCLOSURE OF INDIVIDUAL OPERATIONS. 3/ INCLUDES NM AND WA. ESTIMATES CARRIED FORWARD FROM EARLIER FORECAST.

SUGARCANE FOR SUGAR AND SEED

STATE	AREA HARVESTED		YIELD 1/		PRODUCTION 1/		
	1989	IND 1990	1989	IND 1990	1988	1989	IND 1990
	1,000 ACRES		TONS		1,000 TONS		
FL	420.0	433.0	31.4	33.0	13,304	13,188	14,289
HI	81.4	78.0	89.4	89.7	7,804	7,277	6,997
LA	315.0	170.0	25.7	18.0	7,708	8,083	3,060
TX	35.5	36.2	24.7	26.0	1,088	878	941
U S	851.9	717.2	34.5	35.3	29,904	29,426	25,287

1/NET TONS.

CROP PRODUCTION
NOVEMBER 1990 A-23

AGRICULTURAL STATISTICS BOARD,
NASS, USDA

 (Continued from page 10)

during one day in various parts of the belt; but, most soils are still dry. All planted fields have generally had adequate moisture to seal in the rows but it is hoped that mother stalks are not drying out too badly. Early estimates would indicate that somewhere between 160,000 and 180,000 acres of cane were planted this fall (some 75% more than normal). A mild winter season would allow this acreage to reach its full potential.

SEED QUESTIONNAIRES

Since planting operations are for the most part completed, growers should spend some time filling out ASCS seed questionnaires while they can accurately remember what seed cane was used and the acreage involved. It is important that this industry keep accurate records of its progress and you as a grower should keep accurate records so that you can measure your own progress. The seed cane reports should not only include the acreage you used for seed but also any seed cane that you might have sold to someone else. These records are the only way that final yields of cane can be accurately determined. With the large amount of seed cane used it is important that you do a good job of filling in the report and do it as soon as possible.

HUGH PAUL FANGUY

Hugh Paul Fanguy, Research Agronomist at the USDA Sugarcane Field Laboratory, Houma, LA retired on September 30, 1990, after over 30 years service to the U.S. Government and the Louisiana sugarcane industry. Numerous employees of the League, including this author, had the opportunity to work with Hugh Paul and recognize the outstanding efforts of this devoted sugarcane researcher. The following information on Hugh Paul's government career was provided by Dr. Dick Breaux, retired agronomist with the USDA.

Hugh Paul was an integral part of a team of scientists in the Variety Development Program at Houma, which, cooperatively with the American Sugar Cane League and the Louisiana Agricultural Experiment Station, developed 14 commercial varieties of sugarcane. At present, 7 of these varieties occupy over 99% of the planted acreage in Louisiana.

As the outfield agronomist in charge of multi-location variety testing from 1963-1977, Hugh Paul developed the system to mechanically harvest sugarcane variety trials when hand cutting became impractical. He developed and implemented a more accurate and efficient method of obtaining sugarcane weights in experimental plots using a tractor-mounted hydraulic scale. He was also the first to combine outfield variety test data to detect smaller differences in variety yields which allowed scientists to make better decisions on the overall value of a new variety to the Louisiana industry. Following severe lodging conditions, Hugh Paul recognized the superior harvestability of CP 65-357 in outfield tests and was instrumental in its reintroduction to the test program after it had been discarded for its susceptibility to sugarcane mosaic virus, Strain H. At it peak, CP 65-357 occupied 75% of the Louisiana acreage.

In 1977, Hugh Paul assumed the responsibility for the infield testing program at the Houma Station which kept

(Continued on page 16)

UP FRONT WITH THE LEAGUE

(Continued from page 5)

tion village complex will go to the Poplar Grove fund for preservation and restoration.

Poplar Grove Plantation is located two miles north of Port Allen; cross the I-10 Mississippi River Bridge and take the Port Allen exit north onto LA Highway 1. The plantation is also easily accessible from the old Mississippi River bridge (Highway 190 West); drive south from the bridge on LA Highway 1. Follow the signs from each direction to "Plantation Lights".

Liquid Fertilizers For Sugar Cane

OUACHITA FERTILIZER

NEW IBERIA, LA. (318) 367-8233

Ken Squires
Pilot

PENN-TEX
Helicopters, Inc.
"Precision Chemical Control"
318-278-2174 318-728-4272

THE SUGAR BULLETIN
448-3707

FARM NOTES

(Continued from page 15)

him away from his cooperators' farms. However, he continued to monitor variety performance at all test stages and his advice and opinions weighed heavily on decisions made by the Variety Advancement and Release Committees of the League up to the time of his retirement. Hugh Paul shared his variety expertise with countless groups of sugarcane growers and processors at field days, grower meetings, contact committee meetings and technical meetings. He always addressed them in a language they understood.

The Louisiana sugarcane industry thanks Hugh Paul Fanguy for his contributions and wishes him well in retirement. This author personally wishes to thank Hugh Paul for his numerous years of dedication not only to this industry but also in helping to train those of us who follow in his footsteps. We wish him the best and hope that he has many good fishing days ahead of him in his retirement.

SPECIAL NOTE

There have been numerous questions from growers concerning the LCP 82-89 which they purchased this fall and just recently planted. Most report that the cane is not marking the row very well at this time. One of the faults of this particular variety is that it does not germinate rapidly and generally does not look good in the early spring. In fact, this variety really doesn't "shine" until the fall when it is harvested for yield. The fact that it does not have a good stand showing this fall should not be of great concern to growers; but instead they should be patient and wait for the variety to be there next year.

 (Continued from page 12)

on the A-strikes was achieved by operating at high brix, the target value being 93. "False grain is not tolerated and any occurrence results in disciplinary action against the individual concerned." A modified double magma system is used and increased crystal content at the A-strike leads to reduced production of B-sugar and reduced recycle into the A-massecuite and therefore lower massecuite volume.

Sugar color and decolorization is the subject of several papers. The conclusions include that there were no significant increases in color across clarification or evaporation, but the background color was already high and makes the measurements more difficult. Color increased by 40 to 70% in the factory backends and a significant component of this is the recycle of low grade sugars — another reason for achieving high A-massecuite exhaustion. The overriding determinant of sugar color is the color level of incoming juice, itself determined by cane quality. At their higher levels of input color, it does not appear possible to meet sugar color specifications through optimization of existing process operations. However, studies at the Sugar Milling Research Institute indicate that additional color removal operations in the raw factory would not be cost effective.

Work is continuing on determining the optimum probe type for installation in vacuum pans for automatic control. A radio frequency probe as a measure of the concentration proved to be an accurate and reliable means of brix measurement for the high purity boilings. The industry is still faced with having to use conductivity measurements on the low grade products. Development work is continuing on hydrostatic measurement systems, which they hope will provide continuous readings of both pan product density and level.

A summary is given of past data comparing gas chromatography (GC), high pressure liquid chromography (HPLC) and pol measurements for juices and molasses. They conclude that the relative simplicity and lower cost suggest the JPLC could be used routinely for cane payment and molasses analysis. They note that pol/GC and pol/HPLC differences were highly significant as a measure of cane deterioration. Another measure of losses associated with cane deterioration is to determine ethanol production in deteriorated cane and this may become a routine procedure in their industry. All the papers are well thought through and copies of any of the papers may be obtained by request.

ATTENTION

ALLEE, ALLEE & ALLEN

Announces Its

Precision Grading Service
Lazerplane Equipped

★ Better drainage
★ Better weed control
★ Increase acreage

Also Agent for
Spectro Physics
Laser Plane Sale

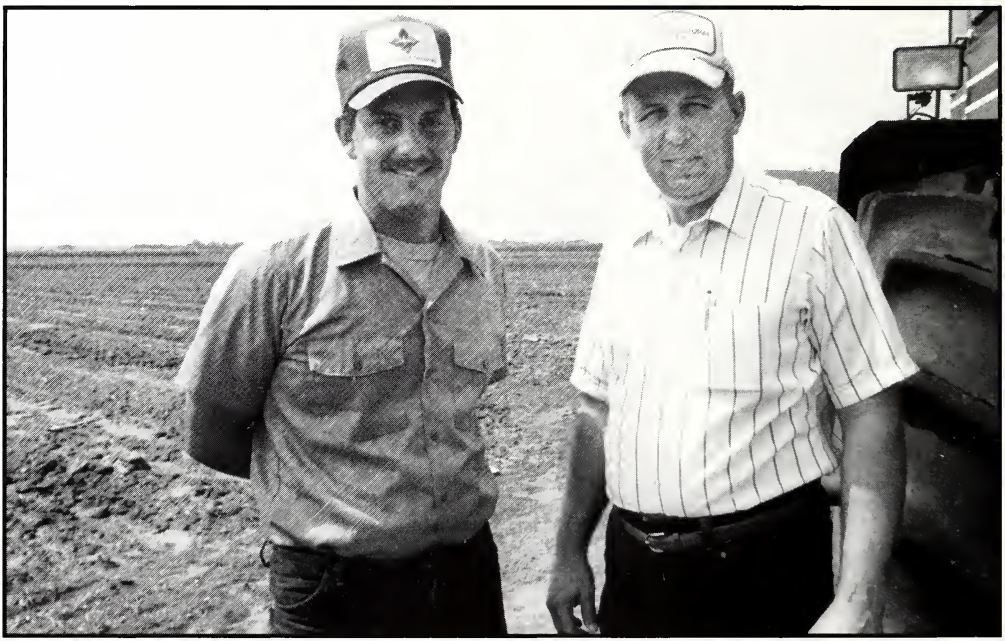
St. James, Louisiana 70086
(504) 265-3965

AWARD WINNERS *(Continued from page 6)*

Rouge Parishes) — Group 1, James Acosta of Donaldsonville, 7,457 pounds of sugar per acre on 14 acres; Group 2, M. Rodrigue & Sons of Vacherie, 7,650 pounds of sugar per acre on 84 acres; Group 3, Nolan Himel, Jr. of White Castle, 6,738 pounds of sugar per acre on 107 acres; Group 4, Yolande Schexnayder of Paulina, 7,895 pounds of sugar per acre on 458 acres; Group 5, M. Rodrigue & Sons of Vacherie, 7,310 pounds of sugar per acre on 512 acres; Group 6, St. Louis Planting Inc. of Plaquemine, 7,052 pounds of sugar per acre on 1,365 acres; and Group 7, Joe Beaud, Jr. of New Roads, 5,534 pounds of Sugar per acre on 2,554 acres.

Pictures of District 1 and District 2 award winners appear in this issue of The Sugar Bulletin. District 3 and District 4 winners will appear in the January 1, 1991 issue.

DISTRICTS I AND II HIGH YIELD WINNERS



District I, Group 2: 50-100 acres

(St. Martinville) — Jody Theriot (left) with St. Martin Parish Extension agent James Devillier won his first high yield award. Theriot received the top honor in group 2 for farms between 50 and 100 acres. Jody harvested an average of 5,833 pounds of sugar per acre off of 54 acres during the 1989 season. He has been raising sugarcane for three years. Devillier says Jody "promises to be an outstanding sugarcane producer." He adds, "As a 4-H'er Jody won second place in sugarcane production contests and was an outstanding junior producer from St. Martin Parish."

(Photos continued on page 19)

District I, Group 3: 100-200 acres

(St. Martinville) — Willie Price (left) with St. Martin Parish Extension agent James Devillier won his fourth high yield award. Price took the top honor in group 3 for farms between 100 and 200 acres. Willie harvested an average of 5,901 pounds of sugar per acre off of 158 acres during the 1989 season. He won the award previously in 1982, 1986 and 1987. He has been producing sugarcane more than 32 years. Devillier says "fully utilizes recommended production practices." He adds that the grower "is an active member of the sugarcane advisory committee."

District I, Group 4: 200-500 acres

(St. Martinville) — Raymond Boudreaux (right) with son-in-law Carl Borel (left) and St. Martin Cooperative Extension Agent James Devillier (center) won his first high yield award. Boudreaux earned the top honor in group 4 for farms between 200 and 500 acres. Raymond and Carl harvested an average of 6,551 pounds of sugar per acre 324 acres during the 1989 season. Raymond has been raising sugarcane for 28 years. Devillier says Raymond is a "top sugarcane producer who consistently utilizes recommended production practices."

District I, Group 5: 500-1,000 acres

(Parks) — Chris Latiolais (right) with son Richard won his sixth high yield award. Latiolais earned the top honor in group 7 for farms of 2,500 acres and larger. Chris and Richard harvested an average of 6,947 pounds of sugar per acre off of 515 acres during the 1989 season. This marks the sixth time in the last seven years that the Latiolais family has received the high yield award. Chris has been raising sugarcane for the past 14 years. St. Martin Parish Extension agent James Devillier calls Chris "an outstanding farmer who is very aggressive and progressive. He quickly adopts new technology."

District I, Group 6: 1,000-2,500 acres

(Youngsville) — Triple V Farm Inc. won its fourth high yield award by capturing the top honor in group 6, for farms between 1,000 and 2,500 acres. Cousins Wilson B. Viator Jr. (left) and Daniel P. Viator (right), with Lafayette Parish Extension Agent Russell Guarino (center), harvested an average 6,725 pounds of sugar off 1,805 acres during the 1989 season. They have been producing sugarcane on the farm of which they are part owners for 18 years.

District I, Group 7: 2,500 or more acres

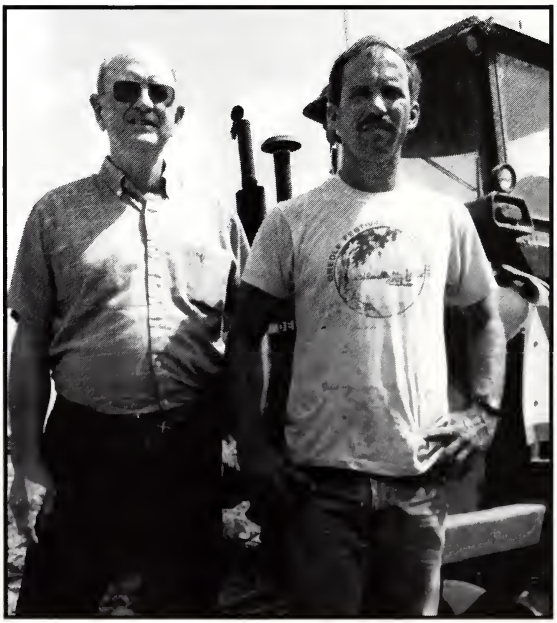
(St. Martinville) — Levert-St. John Plantation Inc. won its thirteenth high yield award, taking first place in group 7, for farms of 2,500 and more acres. Pictures are Lawrence "Boo" Levert III (left) with Russell Frederick (center) accompanied by St. Martin Parish Extension agent James Devillier. The farm yielded an average of 5,006 pounds of sugar per acre off 2,613 acres during the 1989 season. Levert has been in the business all his life. Devillier says the plantation "is a leading sugar producer, and provides the impetus for the annual parish sugarcane field day."

District II, Group 1: 5-50 acres

(Franklin) — Robert Judice Jr. (left), with St. Mary Parish Extension Agent Don Fontenot, won his twelfth high yield award, taking the top honor in group 7 for farm s of 2,500 acres and larger. He harvested an average of 6,693 pounds of sugar per acre off 41 acres during the 1989 season. Robert has been raising sugarcane for the past 28 years and working the same plantation since 1967.

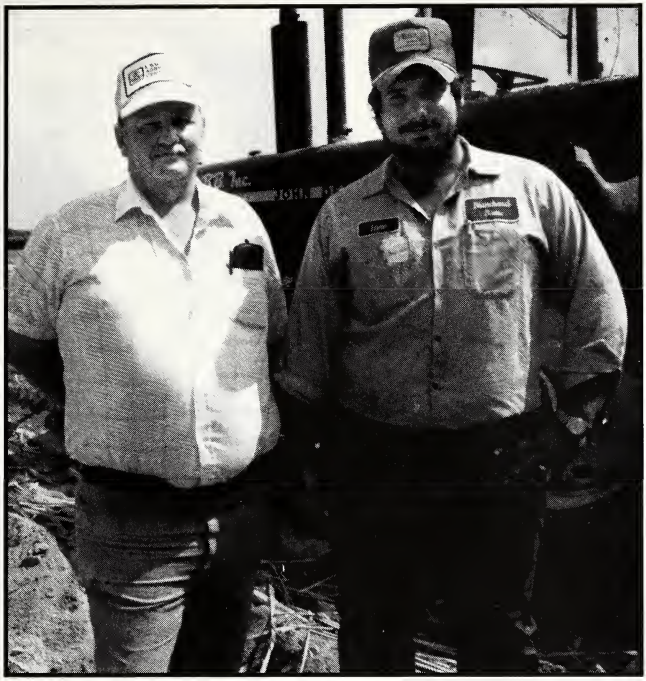
District II, Group 2: 50-100 acres

(Jeanerette) — Bryan LeJeune (right) with Iberia Parish Extension Agent James Abadie won his first high yield award, receiving the top honor in group 2 for farms between 50 and 100 acres. Bryan harvested an average of 6,105 pounds of sugar per acre off 69 acres during the 1989 season. He has been raising sugarcane for five years. Sharing in the responsibilities are his father B. J. and brothers Joe and Ricky.



District II, Group 3: 100-200 acres

(Jeanerette) — Mark Patout (right) of A & S Farms with Iberia Parish Extension Agent James Abadie, won the sugarcane high yield award in group 3 for farms between 100 and 200 acres. This marks the seventh year out of the past nine that Patout has earned the honor. Mark harvested 7,588 pounds of sugar off 162 acres during the 1989 season. He has been producing sugarcane for 15 years and a tenant on the same farm for the last 10 years. His wife Becky is the bookkeeper.



District II, Group 4: 200-500 acres

(New Iberia) — Lane Blanchard (right), with St. Mary Parish Extension Agent Don Fontenot, won his first high yield award, earning the top honor in group 4 for farms between 200 and 500 acres. Blanchard harvested an average of 7,905 pounds of sugar per acre off 216 acres during the 1989 season. He and his family have been raising sugarcane for seven years.

District II, Group 5: 500-1,000 acres

(Charenton) — The Clement brothers won their first high yield award, taking the top honor in group 5 for farms between 500 and 1,000 acres. From left to right (foreground) are Scott Clement and Lenis Clement Sr., and son-in-law Michael Broussard (far right). Behind are Lenis Clement, Jr. and St. Mary Parish Extension Agent Don Fontenot. The men harvested an average of 7,678 pounds of sugar per acre off 659 acres during the 1989 season. They work a 1,100 acre plantation on which they've been producing sugarcane for 18 years.

Commercial Members of the
AMERICAN SUGAR CANE LEAGUE
OF THE U.S.A., INC.

ASSUMPTION BANK & TRUST CO.
P.O. Box 398 Napoleonville, LA 70390

THE BARTLETT COMPANY
Chemical Brokers
4955 River Road
P.O. Box 10710
Jefferson, LA 70181

THE CROPMATE COMPANY
Fertilizer Region
P.O. Box 28 Thibodaux, LA 70302

CAMECO INDUSTRIES, INC.
P.O. Box 968 Thibodaux, LA 70301

FIRST COMMERCIAL BANK
521 Main St. Franklin, LA 70538

DUPLANTIER, HRAPMANN,
HOGAN, & MAHER
Certified Public Accountants
821 Gravier Suite 1300
New Orleans, Louisiana 70112

ESTES REFRACTORY
P.O. Box 94 Jeanerette, LA 70544

THE FIRST NATIONAL BANK
IN DONALDSONVILLE
P.O. BOX 108 Donaldsonville, LA 70346

F. C. SCHAFFER & ASSOCIATES, INC.
1020 Florida Blvd.
Baton Rouge, LA 70802

GULF ENGINEERS & CONSULTANTS, INC.
535 Main Street
Baton Rouge, LA 70802

WESTWAY TRADING CORP.
228 St. Charles Ave., Suite 700
New Orleans, LA 70130

NADLER, INC.
P.O. Box 359
Plaquemine, LA 70765

NATIONAL BANK
FOR COOPERATIVES
Jackson Region
1800E, County Line Road
P.O. Box 16099
Jackson, MS 39236

OUACHITA FERTILIZER
Route 7, Box 49-F
New Iberia, LA 70560

DRAVO LIME COMPANY
Pelican State Division
12797 Scenic Highway
Baton Rouge, LA 70807

SELF INSURANCE ADMINISTRATORS
P.O. Box 11509
New Iberia, LA 70562-1509
A Member Company of Huval Insurance Group

FIRST SOUTH PCA
P.O. Box 667 Thibodaux, LA 70302
P.O. Box 10908 New Iberia, LA 70562

STANDARD SUPPLY & HARDWARE
CO., INC.
P.O. Box 60620 New Orleans, LA 70160

ST. MARY BANK & TRUST CO.
Franklin, LA 70538

LOUISIANA CANE MFG., INC.
P.O. Box 71 Thibodaux, LA 70301

WHITNEY NATIONAL BANK
228 St. Charles Avenue
New Orleans, LA 70130

RAYNE STATE BANK
AND TRUST COMPANY
P.O. Box 99
Duson, LA. 70529

3-D CHEMICAL, INC.
P.O. Box 607
St. Martinville, LA. 70582

e Sugar Bulletin
E. Bayou Rd.
odaux, La. 70301

dress Correction Requested)

BULK RATE
U.S. POSTAGE
PAID
PERMIT NO. 43
Thibodaux, La.

SERIALS DEPT.
LOUISIANA STATE UNIV.
LIBRARY
BATON ROUGE LA 70803

The Sugar Bulletin

OFFICIAL BULLETIN OF THE AMERICAN SUGAR CANE LEAGUE OF THE U.S.A.

Up Front With The League by P. J. deGravelles, Jr. 4

Washington Update With Don Wallace 6

Farm Notes by Dr. Charley Richard 7

The Baton Rouge Line by Tom and Linda Spradley 8

In The Factory by Stephen J. Clarke 10

District III & IV High Yield Award Winners 1989 13

We stand for the encouragement of Home Industries as against Foreign Competition

Vol. 69 — No. 4 JANUARY 1, 1991

The Sugar Bulletin

The Official Organ of the American Sugar Cane League of the U.S.A., Inc.

P. J. deGravelles, Jr., Editor and General Manager
Charles A. Richard, Ph.D., Director of Research and Field Representative
Windell R. Jackson, Senior Agronomist
Herman Waguespack, Jr., Agronomist
John Constant, Business Manager
Nannette B. Nickens, Office Secretary
Paul G. Borron, III, Legal Counsel

Washington Representative:
Wallace and Edwards, Inc.
1150 Connecticut Avenue, N.W.
Suite 507
Washington, D.C. 20036
Phone: (202) 331-4331

Baton Rouge Representative:
Spradley and Spradley
6216 Riverbend Boulevard
Baton Rouge, LA 70820
Phone: (504) 766-1359

Editorial and Executive Office:
206 E. Bayou Rd., Thibodaux, LA. 70301
Phone: (504) 448-3707

OFFICERS AND MEMBERS OF THE BOARD OF DIRECTORS OF THE AMERICAN SUGAR CANE LEAGUE

William S. Patout, III, Jeanerette, LA
President
Dr. Daniel Viator, Youngsville, LA
1st Vice-President
P. J. "Pete" deGravelles, Franklin, LA
Vice President — General Manager
Don Wallace, Washington, DC
Vice President — Government Relations
Patrick Cancienne, Belle Rose, LA
Treasurer
Irving Legendre, Jr., Thibodaux, LA
Secretary

Pat Accardo, Franklin, LA
Bryan Allain, Jeanerette, LA
J. G. Beaud, Jr., New Roads, LA
Bert Beyt, Jeanerette, LA
Ramon E. Billeaud, New Orleans, LA
Felix Blanchard, New Iberia, LA
Ronald Blanchard, Napoleonville, LA
Neal Bolton, St. James, LA
Joseph E. Boudreaux, Thibodaux, LA
Fred Y. Clark, Franklin, LA
Lawrence Dugas, New Iberia, LA
Dan Duplantis, Raceland, LA
Paul Ellender, Bourg, LA
John F. Gay, Plaquemine, LA
Ronald Gonsoulin, New Iberia, LA
Mike Graugnard, Edgard, LA
Warren Harang, III, Donaldsonville, LA
Roddy Hulett, St. Martinville, LA
Bobby Judice, Franklin, LA
Kenneth Kahao, Port Allen, LA
Denis Lanaux, Killona, LA
Melvin Landry, New Iberia, LA
D. C. Mattingly, Paincourtville, LA
Jerry McKee, Thibodaux, LA
Kenneth Peltier, Thibodaux, LA
R. L. Roane, Jr., Jeanerette, LA
Howard Robichaux, Labadieville, LA
Raphael Rodriguez, Franklin, LA
Mel Schudmak, White Castle, LA
Frank Sotile, Donaldsonville, LA
David Stewart, Lakeland, LA
Roland Talbot, Thibodaux, LA
Jackie Theriot, Breaux Bridge, LA
James Thibaut, Donaldsonville, LA
Glenn Timmons, Brusly, LA
Eugene Woods, Paincourtville, LA

HONORARY MEMBERS

Joseph G. Beaud, Sr., New Roads, LA
Charles Billeaud, Broussard, LA
Paul G. Borron, Jr., Plaquemine, LA
Jerry L. Dickson, New Orleans, LA
Gilbert J. Durbin, New Orleans, LA
F. Evans Farwell, New Orleans, LA
J. N. Foret, Jr., Thibodaux, La.
Andrew Gay, Plaquemine, LA
F. A. Graugnard, St. James, LA
Warren J. Harang, Jr., Thibodaux, LA
Lloyd Lauden, New Orleans, LA
E. W. McNeil, Brusly, LA
J. Randolph Roane, Jeanerette, LA
Charles C. Savoie, Belle Rose, LA
Edward T. Supple, Bayou Goula, LA
E. Berkshire Terrill, Brusly, LA
John Thibaut, Napoleonville, LA
M. V. Yarbrough, Fort Smith, Ark.

POSTMASTER: Send address changes to THE SUGAR BULLETIN, 206 E. BAYOU RD., THIBODAUX, LA. 70301.

MAXXUM™

Hitch your wagon to a star.

There's just one thing most every owner calls on his mid-range tractor to do — more. Lift a heavier implement. Power extra hydraulics. Squeeze a little more muscle out of the PTO. And sometimes do it all at once. The new line of Case International MAXXUM tractors is up to the task. Here's why:

- Category 11 three-point rear hitch, the strongest available — with 7,700 pounds lift capacity.
- Easy-to-use lower link sensing, electro-hydraulic controls in full view from the cab.
- Efficient "Hitch Command" controls.

The hitch is just one of many reasons to own a MAXXUM tractor. Others include: choice of fully synchronized or powershift transmissions, with 16 forward and 12 reverse speeds, standard forward/reverse shuttle shift, an eight-speed creeper option and three horsepower selections, 77, 86 and 94 PTO (57, 64 and 70 kW).

And all three models are backed by the best warranty* in the business: five years or 5,000 hours, whichever occurs first. Come in to see the MAXXUM line of tractors today.

* Excluding tires, which are covered by their own manufacturer's warranties. A $200 deductible applies to each repair after the first year.

[a]JI Case Company 1989

Switzer Sales and Service
Jeanerette, LA
(318) 276-6384

Gremillion's, Inc.
New Roads, LA
(504) 638-6347

Lanier Int'l. Inc.
Abbeville, LA
(318) 893-1988

Lemann's Farm Supply Inc.
Baton Rouge, LA
(504) 357-6453

Thibodaux, LA
(504) 447-3776

Donaldsonville, LA
(504)473-7927

case IH

UP FRONT WITH THE LEAGUE

By P. J. deGravelles, Jr.

Editor's Note: *During the latter years of World War II, there was an acute labor shortage in the Louisiana sugar industry. Because very few farming operations had mechanical cane cutters, most of the crop was still being cut manually. The use of German prisoners of war to cut the crop alleviated the labor shortage. Tom Butler, Associate Director of the Leonidas Polk Library at Nicholls State University published an article in the Summer 1973 edition of "Louisiana History" entitled, "Prisoner of War Labor in the Sugar Cane Fields of Lafourche Parish, Louisiana: 1943-1944." With Mr. Butler's permission, we are printing his article as a guest editorial. I am certain our readers will find this article very interesting.*

Prisoner of War Labor in the Sugar Cane Fields of Lafourche Parish, Louisiana: 1943-1944

By JOSEPH T. BUTLER, JR.

Associate Director, Leonidas Polk Library
Nicholls State University, Thibodaux, Louisiana

Worldwide disruption of manufacturing, industrial and economic activities in 1943 and 1944 by World War II directly affected the production and use of sugar in the United States.

The conquering and occupation of the Philippines and Java (Indonesia) by the Japanese almost destroyed cane sugar production in these two vital areas. In Europe the sugar beet fields were also disrupted by the war, thus curtailing their production. Indirectly affected were other sugar cane producing areas, such as Hawaii, India, Puerto Rico and Cuba. In the continental United States only Florida and Louisiana produce sugar extensively from cane culture, and the growing area does not extend over the entire area of either state.[1]

Sugar was an important commodity in the civilian economy and in the military efforts of our nation and its allies during World War II. Its uses are classifiable into home use, commercial use and chemical and other nonfood uses. In the home sugar is a staple used in cooking, preserving, canning, baking and sweetening; its commercial uses are much the same. The sweetening agent is included in the manufacture of many chemicals which find their way into finished products such as medicines, plastics, vitamins, drugs, explosives and certain acids. In the fermentation of sugar, the by-products are glycerols, fats and ethyl alcohol. These products are all used in manufacturing other products ranging from fertilizers to synthetic rubber.[2] Consequently, there is, and was, a tremendous overall need for sugar in the United States.

(Continued on page 5)

[1] George Peterkin Meade, "Sugar," *Encyclopedia Britannica* (1969 ed.), XXI, 382.

[2] Andrew Van Hook, *Sugar; Its Production, Technology, and Uses* (New York, 1949), Figure 23.

UP FRONT WITH THE LEAGUE *(Continued from page 4)*

Immediately after the war started, the price of sugar began to rise. In 1941, the Office of Price Administration set a price ceiling on sugar and instituted rationing. To encourage domestic production, the Sugar Act of 1937, which set minimum wages for cane workers and gave sugar planters benefit payments, was extended to the end of 1944. Benefit payment to growers was increased in 1943 to enable them to pay the harvesting wages. The combination of an increased demand for sugar and shipping tied up with the war effort prompted the President of the United States in 1944 to suspend all production and marketing quotas.[3] Thus the sugar planters were free to plant as much as they could handle.

This, then, was the situation that the Florida and Louisiana sugar producing areas faced during the war years. In Louisiana, Lafourche Parish's problems at this time were indicative of the problems of all the sugar parishes.

The total number of acres planted and harvested in sugar cane for Louisiana during the years 1942-1944 was as follows: In 1942, 294,000 acres were planted and 269,000 acres were harvested. The following year 282,000 were planted and 257,000 acres were harvested.[4] The actual harvested figure for sugar cane in 1944 was 246,000 acres.[5] Out of these total production figures for the state of Louisiana, Lafourche Parish in 1942-1943 had approximately 30,545 acres planted in sugar cane.[6] In 1944-45, it had approximately 31,113 acres planted.[7] This did not include planters who raised less than 500 tons of cane. Lafourche Parish, therefore, was planting and harvesting approximately 12.6 percent of the total acreage of sugar cane in the state.

Other than the sugar mills, this industry was not highly mechanized during the 1940s. Most of the planting and harvesting was done by hand. There was a beginning toward more extensive use of high wheeled, all purpose cane tractors and other labor-saving implements such as hoeing machines, stubble diggers, cane pilers and loaders, which were proving more efficient.[8]

Harvesting cane had not progressed much mechanically before this time. It was not until the years 1941-1943 that a mechanical cane harvester, designed by the B. C. Thompson Machinery Co. of Thibodaux, Louisiana, was put into general use. The company further perfected its harvester in 1945 by the addition of a cane piling device.[9] Only a few of the larger planters, however, were able to finance such machines, so the cutting and loading of cane continued to be accomplished mostly by hand in the early 1940s.

Large acreage allotments, urgent demand and the impetus of a wartime

(Continued on page 16)

---

[3] J. Carlyle Sitterson, *Sugar Country; The Cane Sugar Industry in the South, 1753-1950* (Lexington, 1953), 393.

[4] A.B. Gilmore (ed.), *The Louisiana Sugar Manual* (1944-45 ed.; New Orleans, 1945), XIV.

[5] U.S. Department of Agriculture, *Agricultural Statistics 1946* (Washington, 1946), 97.

[6] Gilmore (ed.), *The Louisiana Sugar Manual* (1942-43 ed., New Orleans, 1943), 198-200.

[7] Gilmore (ed.), *The Louisiana Sugar Manual* (1944-45 ed.), 209-211.

[8] Sitterson, *Sugar Country,* 387.

[9] Louis J. Rodriguez, "B. C. Thompson Louisiana Entrepreneur," *Louisiana Studies,* IX (1970), 166.

WASHINGTON UPDATE WITH DON WALLACE

FARM BILL SIGNED

President Bush signed the 1990 Farm Bill November 28 saying the new law builds on success of the 1985 farm bill, continues market orientation and is environmentally progressive. Bush said, "It lets farmers make more of their own production decisions based on the market, rather than on government support prices. It also encourages the research that is so crucial to helping our farmers maintain their global lead in agriculture," he added.

The new farm bill, which will guide U.S. agriculture policy through 1995, authorizes spending of about $54 billion over the life of the bill. However, the spending cuts contained in the budget reconciliation law will cut agriculture program spending to about $41 billion through 1995.

USDA ANNOUNCES AN INCREASE IN SUGAR QUOTA

Secretary of Agriculture Clayton Yeutter announced November 30 an increase in the amount of sugar eligible for entry under low-duty in the 1990/91 period. The tariff-rate import quota is increased by 375,000 metric tons (about 413,467 short tons), from 1,725,000 metric tons, raw value, to 2,100,000 metric tons. The increase became effective December 3. Secretary Yeutter said continued supply-demand imbalances necessitated the upward adjustment in quota level.

A representative of the domestic sugar industry said that the Department of Agriculture made a serious error in increasing the sugar quota and that it would have a negative economic impact on U.S. sugar growers. USDA was warned that a quota increase, based on inaccurate statistics, could jeopardize the congressionally mandated no-cost provision of the domestic sugar program. Prior to the quota increase decision, USDA had been informed by a spokesman for the Louisiana sugar industry that their crop could be 170 percent higher than official USDA estimates. Also USDA crop projections for Florida were below industry reports and two-thirds of the crop remained to be harvested. The USDA announcement was cited as a mistake for the following four reasons:

(1) USDA production estimates are too low.

(2) USDA consumption estimates are too high.

(3) All U.S. producing areas are in full harvest and most are expecting higher yields than USDA's projections.

(4) USDA officials have speculated that consumption figures could be distorted by heavy one-time purchases for "Operation Desert Shield."

GATT NEGOTIATORS FAIL TO REACH AGREEMENT

The "final" negotiating session of the Uruguay Round of GATT negotiations, a four-year effort to establish new trading rules in virtually all areas of manufacturing, services and agriculture, adjourned December 7 without reaching agreement. The week-long session in Brussels failed to make progress after the European Community, joined by Japan and Korea, objected to virtually every provision in a working paper prepared by the Chairman of a special Agriculture Negotiating Group.

(Continued on page 15)

FARM NOTES By Dr. Charley Richard

LCP 82-89 SLOW TO START — EXTENSION GROWER MEETINGS — SOUTHERN AGRIBUSINESS FORUM

In the last issue of the Sugar Bulletin I placed a special note concerning stands seen during the fall of 1990 of the newest variety, LCP 82-89. Many growers around the belt have complained that this variety did not germinate as rapidly as others and were questioning whether there was anything wrong with the cane. The answer is that we do not believe there is anything wrong but instead we think this is like the typical growth pattern for this variety.

Daniel Naquin, League Secondary Station Operator near Thibodaux, as other secondary station operators who are most familiar with LCP 82-89's growth pattern, will tell you that this particular variety does not look outstanding at any time of the year until late summer and early fall. It is not until later in the season, when you are ready to cut it, that this variety begins to shine in its appearance. It should be remembered that in outfield tests over the last three years, this variety has performed better than CP 65-357 and CP 70-321 in yields of cane tonnage and sugar at the normal harvest time.

League Agronomists Windell Jackson and Herman Waguespack, Jr. have noted, like the secondary station operators, that LCP 82-89 does not look exceptionally good in the early spring and even during the early summer. Therefore it does not surprise us that stands did not look good this fall after planting. Our only request is that you be patient and give the cane time. Do not make any hasty decisions concerning this variety until you have had a chance to cut it as seed cane. We believe that growers will feel better about the cane by planting time.

EXTENSION GROWER MEETINGS

Within the next few weeks the annual parish spring grower meetings will be conducted by the Louisiana Cooperative Extension Service. At these meetings the latest in research findings and recommendations will be discussed. There is not a great deal of field work that you can be doing at this time of year other than the important task of seeing to it that there is no standing water in your fields. Therefore you should have an opportunity to attend the meeting in your own parish or perhaps in a neighboring parish. These meetings usually have ample opportunity for discussion between growers and the scientists and extension agents. This is your chance to ask those questions concerning research results and recommendations that you currently have.

ASSCT

The annual meeting of the Louisiana Division of the American Society of Sugar Cane Technologists will be held on February 14 and 15, 1991. This year there will be some changes from the traditional meeting held each February. For one thing, the meeting will be held at the Baton Rouge Hilton Hotel. Secondly, the meeting will begin Thursday morning with the business session beginning at 10:30 a.m. rather than at 4:00 p.m. as is usually the case. A joint manufacturing/agricultural session will also be held at this time. The technical manufacturing session will

(Continued on page 24)

The Baton Rouge Line

By Tom and Linda Spradley

MEET YOUR LEGISLATOR

This month we continue to introduce you to the legislators that represent you. These representatives have been very supportive of the sugar industry, and we would like for you to get to know them a little better.

SENATOR JOHN E. "J.E." JUMONVILLE, JR. has represented District 17, comprised of Iberville, West Baton Rouge, Pointe Coupee, and East and West Feleiciana Parishes, since 1976.

As Senator of these parishes, he represents Cora-Texas, Cinclare and Alma Sugar Mills, and hundreds of sugar cane farmers. He says he has seen the good as well as the bad times and, as a result, has a special affinity for the sugar industry.

J.E. received his Bachelor of Science degree in Agriculture Business from LSU. He has been involved with agriculture all his life — cattle, horses, soybeans, corn, wheat, and other grains.

Actively involved in the Senate, J.E. is Chairman of the Senate Commerce Committee; Vice Chairman of the Senate Finance Committee; and serves as a member of the Senate Committees on Labor and Industrial Relations, and Natural Resources.

J.E. is married to the former Beverly Ruth Callais.

REPRESENTATIVE JOHN SIRACUSA has represented District 51 since 1976. This district is comprised of portions of Assumption, St. Mary and Terrebonne Parishes. Most of you reading this Bulletin are well aware that these parishes are very active in the production and harvesting of sugar cane.

John is self-employed, and graduated from Sacred Heart Academy in Morgan City. He served in the Korean Conflict.

John serves as Vice Chairman of the House Agriculture Committee and is an active member of the House Judiciary and Natural Resources Committees. Additionally, he has been a member for quite some time of the Southwest Energy Council (SWEC), and currently serves on the Executive Council. The SWEC is comprised of nine energy producing states who work together to deal with the nation's energy and environmental policies.

FREE CALL

1-800-738-2263

Want to Buy
Sugar Mill Equipment

1 Evaporator, 10,000 to 15,000 SFHS
Four Centrifuges — Western State 37" x 30"
Four Centrifuges — Western State Automatic 40"x36"
One Boiler Feed Pump — 300 GPM with TEFC Motor
One Electric Motor — 200 HP, 1200 RPM, 44OV/60C/3, Continuous Duty

CANE TRACTOR PARTS

Route 1, Box 319-T
Jeanerette, LA 70544
(318) 276-3453

PLANTING IS YOUR BUSINESS

OUR BUSINESS IS YOUR PLANNING
AND HOW YOU GROW FINANCIALLY

A. A. HARMON & CO.
(A Corporation of Certified Public Accountants)
Professionals in Planning for:

Cash Flow	Accounting	Taxes
Retirement	Computerization	Estates

311 Baronne Street, New Orleans, Louisiana 70112
Call collect — Glenn V. Weick or David M. Bassemier
(504) 586-0581

GOODYEAR

SPECIAL
SURE-GRIP TD-8

GOODYEAR TIRES FOR YOUR CAR, TRUCK, FARM OR OFF HWY. EQUIPMENT

- 24 HR. ROAD SERVICE
- COMPLETE AUTOMOTIVE CERTIFIED SERVICE
- TRUCK TIRE BALANCE AND ALIGNMENT

NOBODY FITS YOU LIKE GOODYEAR

SUPER TRACTION • SUPER STRENGTH

GENERAL ELECTRIC
AUTHORIZED DEALER

7:30 AM - 6:00 PM MON. - FRI.
7:30 AM - 1:00 PM SAT
1203 ST. PATRICK HWY
THIBODAUX

PIT STOP
YOUR ON FARM SERVICE SPECIALIST

GOODYEAR AUTO SERVICE CENTER
1-800-256-1269 (504) 447-2696

IN THE FACTORY

INFORMATION

Stephen J. Clarke
Audubon Sugar Institute
Louisiana Agricultural Experiment Station

It may be a cliche but the statement that information is the lifeblood of any organization is as applicable to the sugar industry as to any other operation. To be of greatest usefulness the information needs to be timely, to the point and also readily understood by the personnel involved. Our industry produces a large amount of data in the form of factory reports, cane analysis data, etc. but I wonder how much of this is fully appreciated and properly used. There is also the need for decisions on what useful information is not available and on whether it may be available from the data bases already at hand. For example, useful information may well be buried in the core laboratory files and could be reclaimed by careful evaluation of the data.

A simple example of data being produced in a timely manner is what we have attempted to do with the molasses exhaustion survey this year. Although there have been a few glitches in returning the information as quickly as possible, this year's effort has shown that we can do this as a regular part of our program. Although the results are interesting on their own, their full utility will not be realized if the mills do not react. There have been a number of questions as to why the target purity has not been met or why one mill achieves better results than another. This type of question cannot be answered simply and requires that the individual mills be prepared to obtain the information for themselves. This rarely involves elaborate analysis but rather the application of standard analytical procedures to non-routine samples. High final molasses purity values can be the consequence of several factors, for example, poor quality massecuites with low crystal content, insufficient cooling, too much reheating and improper centrifugal operation. This is not a complete list by any means, but the mills can distinguish between them by getting the temperature and analytical data themselves. Special sampling points need to be set up right through the system so that massecuite samples can be collected and the mother liquor purity (molasses) at each stage be measured. This requires that the mill have a small centrifugal or, preferably, a nutsch bomb of sufficient size to recover sufficient sample for convenient analysis. All the analyses involved in this system are for apparent purity so that the decrease (hopefully) through the system can be determined. Single analyses will not show very much and a regular sampling and analysis schedule is necessary to properly appreciate what is happening in the crystallizers, etc.

There is much collection of data but it remains on the laboratory report sheet and is not used to improve factory operation. If analyses or calculations are performed but not used they should probably be discontinued. We reported the detailed assessment of boiling house data at last year's February ASSCT meeting and this is being continued at

(Continued on page 25)

The following is a news release issued by the Office of Public Affairs of the United States Department of Agriculture.

USDA CAUTIONS PRODUCERS OF CHANGE IN "TRIGGER" FOR SWAMPBUSTER VIOLATIONS

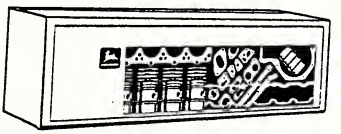
WASHINGTON, Dec. 7 — The recently enacted 1990 farm bill significantly changes conditions under which a producer could lose many U.S. Department of Agriculture benefits because of "swampbuster" violations, Keith Bjerke, administrator of USDA's Agricultural Stabilization and Conservation Service, said today.

"Under the new law, alteration of a wetland may trigger swampbuster penalties for current and subsequent crop years, whereas under the old law planting of an annual crop on a converted wetland was the only trigger for penalties," Bjerke said. "I strongly suggest that producers become familiar with the changes before undertaking any drainage or other alteration of lands that could be considered wetlands," he added.

The Food, Agriculture, Conservation and Trade Act of 1990 was signed into law November 28 as P.L. 101-624.

Where Every Part Delivers It All

Winter Overhaul Discounts



12 MONTHS
OR 1500 HOURS,
WHICHEVER OCCURS FIRST

ENGINE OVERHAUL AND
PISTON-LINER KITS
(JOHN DEERE MANUFACTURED ENGINES)

4020 TRACTOR	$ 958.00
4230 TRACTOR	$ 979.00
4430 TRACTOR	$1,015.00
4640 TRACTOR	$1,125.00
6466 ENGINE	$1,125.00

JOHN DEERE

LABOR

INSTALLATION LABOR WILL BE COVERED IF DEFECTIVE PART AND ITS REPLACEMENT ARE INSTALLED BY AN AUTHORIZED JOHN DEERE DEALER.

SUNSHINE EQUIPMENT CO., INC.

Hwy. 70 East
Donaldsonville, LA 70346
504-473-9861

100 Circle Dr.
Laplace, LA 70068
504-651-2598

1524 Ridgefield Rd.
Thibodaux, LA 70301
504-446-5061

Robert Judice, III Receives Lloyd Lauden Scholarship

Left, Robert Judice, III; Right, Lloyd Lauden.

Robert Judice, III of Verdunville, Louisiana, a graduate of Hanson Memorial High School in Franklin, Louisiana, is the first recipient of the Lloyd Lauden Scholarship. Mr. Lauden, longtime Agronomist and Field Representative of the American Sugar Cane League, was on hand at the Honors Convocation at LSU to award the scholarship to Mr. Judice.

Upon Mr. Lauden's retirement in 1985, the American Sugar Cane League established an endowment to fund the Lauden Scholarship. Under the terms of the agreement with the LSU College of Agriculture, earnings from the endowment will fund undergraduate scholarships to aid Louisiana high school graduates to pursue undergraduate studies in agriculture in the disciplines of Agronomy, Agricultural Economics and Agribusiness or Food Systems and Agricultural Engineering at Louisiana State University in Baton Rouge.

Members of the American Sugar Cane League and persons associated with the sugar industry are encouraged to make tax deductible contributions into the Lloyd Lauden Scholarship Fund. It is the goal of Mr. Lauden, the American Sugar Cane League and the University to increase the endowment to the extent that additional scholarships can be awarded to deserving students. For more information, contact the American Sugar Cane League.

DISTRICTS III AND IV HIGH YIELD AWARD WINNERS 1989

District III, Group 1: 5-50 acres

(Belle Rose) — Robert LeBlanc (right) with Assumption Parish Extension agent Donald Nolan won his first high yield award, taking the top honor in group 1 for farms between five and 50 acres. LeBlanc harvested an average of 7,418 pounds of sugar per acre off 24 acres during the 1989 season. All acreage is heavy soil. Robert is part owner of the farm and has been producing sugarcane on that farm for 21 years.

District III, Group 2: 50-100 acres

(Raceland) — Tommy Richard (left) with Lafourche Extension agent Mike Hebert won his eighth high yield award in as many years in group 2 for farms between 50 and 100 acres. Richard harvested an average of 8,428 pounds of sugar per acre off 48 acres during the 1989 season. He owns the plantation he farms and has been producing sugarcane for 26 years.

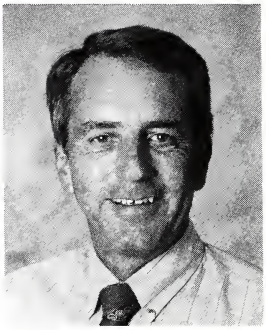
(Photos continued on page 26)

First South
Production Credit Association

Experienced and Knowledgeable
Agricultural Lender

Offices in

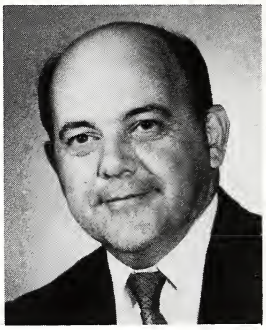
New Iberia



LESTER SIMON
Regional V.P.
(318) 364-0217

Farmer Owned
Since 1934

Thibodaux



HARVEY GONSOULIN
Regional V.P.
(504) 446-9450

Ken Squires
Pilot

PENN-TEX
Helicopters, Inc.

"Precision Chemical Control"

318-278-2174 **318-728-4272**

Liquid Fertilizers
For Sugar Cane

OUACHITA FERTILIZER

NEW IBERIA, LA. (318) 367-8233

SUGAR BULLETIN WANT ADS
GET RESULTS

The Sugar Bulletin

206 E. Bayou Road
Thibodaux, Louisiana 70301

(504)
448-3707

WASHINGTON UPDATE

(Continued from page 6)

While agriculture is only one of 15 areas involved in the Uruguay Round, the United States has insisted that progress in the agriculture negotiations is an essential pre-requisite to concluding the round. The U.S. continues to insist that any agreement on agriculture must require separate and distinct action in three areas: internal supports, export subsidies and market access. The EC contends that the agreement should allow adjustments in any combination as long as the net result would achieve the agreed reduction objective. The approach is known as "rebalancing."

In an effort to break the deadlock, the 107 countries participating in the talks made a last-ditch effort to resolve the dispute over agriculture. The Chairman of a special agriculture negotiating group submitted a paper, now known as the 30-30-30 proposal, which would require GATT participants to reduce internal subsidies by 30%, reduce export subsidies by 30% and increase market access by 30%. The proposal also establishes 1989/90 as the base year for measuring the adjustments. The EC, Korea and Japan raised numerous objections to the paper and negotiations were suspended. The negotiators from all countries met and declared the negotiations "prolonged" and tentatively agreed to meet in Geneva on an unspecified date in January if the "atmosphere" has improved.

The outlook for the future of the round is highly uncertain at this point. President Bush, U.S. Trade Representative Carla Hills, and Agriculture Secretary Yeutter will be conducting bilateral discussions in an effort to break the impasse. If their efforts fail, the Administration may have to decide whether to ask Congress to extend the "fast-track" authority to facilitate continuation of the negotiations.

DAVID C. CARTER, PRESIDENT OF U.S. BEET SUGAR ASSN. DIES

David C. Carter, 61, President of the U.S. Beet Sugar Association since 1975, died of cancer November 29 at his home in Derwood, Maryland. Mr. Carter was active in the sugar industry throughout his business career. He was a founder of the American Sugar Alliance, serving as its first president from 1983 to 1984 and again from 1987 to 1988. He was an industry adviser to the government during the negotiation of the International Sugar Agreement in the late 1970s.

He worked in California for the Western Beet Sugar Producers, the California Beet Growers Association and the Spreckels Sugar Company before moving to Washington, DC and joining the U.S. Beet Sugar Association in 1969. Mr. Carter will be remembered for his endless work on behalf of maintaining a viable domestic sugar industry.

THE
SUGAR BULLETIN
WELCOMES
J. I. CASE
AS A NEW
COMMERCIAL
MEMBER

economy all provided the incentive for the planters of Lafourche Parish and other sugar producing parishes to increase production. But there was the problem of a scarcity of manpower resulting from the war draft and war-oriented industry which paid higher wages. In their search for a suitable replacement labor force the planters sought the aid of the local county agents, the Agricultural Extension Service, War Manpower Commission officials and the American Sugar Cane League, which carried the bulk of the task and responsibility. This organization was powerful, well organized, and had a representative in Washington to lobby for the sugar industry. Numbered among its officials and members were some of the state's most prominent men.

As early as February 25, 1942, Paul G. Barron, attorney for the league, reported that the labor committee of the league had met and concluded that the labor shortage had been caused by the intervention of the Works Progress Administration, unemployment compensation, the draft and new industries. A recommendation followed to consider the possibility of obtaining exemptions from the military draft for laborers in the sugar industry.[10] At a later meeting held in April 1942, W. C. Kemper, president of the league, reported that he had made an appointment with Brigadier General Raymond Fleming, head of the State Selective Service, to discuss the deferment of skilled field and factory men.[11] During this interview, General Fleming agreed to do all he could to see that the sugar crop would be harvested. He further suggested that an employer should ask for a deferment directly through the local draft board as soon as he suspected a laborer may be classified 1A.[12]

The use of high school boys to alleviate the manpower shortage in the cane fields of Iberville Parish was discussed at an October meeting. Some members of the American Sugar Cane League recommended that other sugar parishes follow Iberville's plan as a partial solution to the labor problem.[13] When Governor Sam Jones was contacted regarding the utilization of graduating boys from the sugar parishes' schools, he advised that each parish's respective school board handle this matter. Giving school vacations during the harvesting season was also discussed.[14]

In a December 1942, compilation by the league of the plight of the sugar industry in the approaching year, the pressing labor shortage in the cane fields was given top priority.[15]

At a league meeting a few months later the use of prisoner of war (POW) labor was first considered. President W. C. Kemper reported that regulations for the treatment and housing of prisoner of war labor were specifically defined. He added that the type of houses found

(Continued on page 17)

[10] Minutes, American Sygar Cane League of U.S.A. Feb. 25, 1942, p. 2. Sugar Archives, Microfilm Copy, Nicholls State University Library, Thibodaux, Louisiana.

[11] *Ibid.*, April 29, 1942, p. 4.

[12] *Ibid.*, Oct. 28, 1942, p. 3.

[13] *Ibid.*, 4.

[14] *Ibid.*, May 26, 1943, p. 5.

[15] *Ibid.*, Dec. 2, 1942, p. 3.

on the plantations were unsuitable for housing prisoners according to standards established by the army.[16] In July 1943, a report was read to the executive committee of the league at its regular meeting, stating that an application had been filed with the commanding general of the Southern Defense Command for employing 10,000 Italian prisoners of war in the cane fields. The matter was then relayed through proper channels to the appropriate authorities in Washington. Senator Allen Ellender of Louisiana was informed of these activities by the league officials. He, in turn, advised that he had wired the Chief of Staff's office asking that the existing regulations concerning such prisoners be modified so that they could be employed in the south Louisiana cane belt during the planting and harvesting season of 1943.

A survey made by C. E. Kemmerly, state supervisor of emergency farm labor, Agriculture Extension Division in Baton Rouge, Louisiana, predicted that 32,000 laborers would be needed. Using these figures and breaking them down into 25,000 field workers and 5,000 factory workers, the survey was forwarded to the extension division in Washington, D.C.

The War Department had a regulation prohibiting the establishment of prisoner of war camps within 150 miles of any coast. The Louisiana sugar cane belt was located almost totally inside this limit. Kemper, in discussing the use of captive labor at a league meeting, recommended that steps should be taken immediately to have this ruling changed. All of the league's efforts in this matter were directed through the two senators from Louisiana.[17]

The proper bureaucratic wheels were started rolling, but time was growing short. The harvesting and planting season of 1943 was rapidly approaching. Therefore, on August 20, a special conference called by Governor Jones was held in the local high school in Thibodaux regarding the acute labor shortage. Selected representatives from industry and agriculture were present as well as top officials of the War Manpower Commission, Selective Service System, State Welfare Department, county agents of the sugar parishes, superintendents of education of the same parishes, members of the Civilian Defense Council and three representatives of the American Sugar Cane League. Brigadier General Fleming, head of the State Selective Service System, the state chairman of the War Manpower Commission and the Civilian Defense Council were indicative of the higher echelon present. The American Sugar Cane League was represented by Frank Barker, chairman of the labor committee. Following a summation of the possible solutions, this high-level group reached some conclusion regarding each possibility.

The Selective Service officials were questioned about obtaining by furlough skilled men who were serving in the army. General Fleming responded that, although possible, the red tape involved rendered it impractical. The possible deferment of men who were scheduled for call in September, October and November was discussed. The general

(Continued on page 18)

[16] *Ibid.*, May 26, 1943, p. 5.

[17] *Ibid.*, July 28, 1943, p. 2-4.

 (Continued from page 17)

noted, as he had previously, that, if it could be shown that such a man was definitely needed in the fields or factory, then the Selective Service Board would defer him until after the harvest.

The use of high school boys was also examined. The superintendents of education assured all officials present that any high school boy used during the harvesting season would automatically get at least a "D" in his subjects and that, if the boy wanted to raise his grade, necessary school work and exams would be made available. The superintendent of Lafourche Parish observed that only about 400 high school boys would be available from his parish.

Importing labor from Puerto Rico, the Bahamas and other West Indies islands was another consideration. However, those in attendance were informed that the islands controlled by Great Britain did not allow their citizens, mostly Negros, to work in areas where "Jim Crow" laws or segregation existed. This, of course, eliminated any possibility of importing laborers from these islands to south Louisiana.

The importing of Mexican labor was then contemplated. But this was not possible either because the United States Empoyment Agency had already taken options on all the Mexican labor that would come into the United States during the next two months for other farming areas.

The county agents said that everything possible was being done to ensure farmers full-time employment of all laborers. Welfare officials, with the governor's approval, assured everyone present that anyone on relief could go to work on any type of agricultural job and that after the harvesting was over would be reinstated on the welfare rolls without having to reapply. The officials in charge of the Unemployment Insurance Division added that unemployment compensation would be halted to anyone who could work if such an individual was called to their attention. The industry representatives expressed their desire to cooperate in any way possible. Some indicated that they, too, would be needing more laborers in the near future.

League investigator Charles Farwell reported on the use of prisoners of war as a labor force. He was of the opinion that the 150-mile-line limit could probably be changed. General Fleming remarked that he had been told by the proper military officials that POWs made excellent farm hands.[18]

Following this conference the concept of captive labor emerged as the most feasible solution. The efforts of the league, the Louisiana senators, and the lobbyist in Washington were apparently productive because at the league's meeting on September 30, 1943, a resolution was passed thanking army officials for their help in gaining clearance to secure prisoners of war for the year's sugar cane harvest.[19]

The actual use of these laborers, who turned out to be Germans and not Italians as first asked for, entailed the usual government red tape plus wartime red tape. Camps had to be built, housing, guarding, and monetary compensation had to be resolved. Fortunately, the army had been working on

(Continued on page 19)

[18] *Ibid.,* Aug. 25, 1943, pp. 3-7.

[19] *Ibid.,* Sept. 30, 1943, p. 4.

detailed plans for permanent POW camps and on plans for their use as a labor force but the entire project was slow getting started primarily because of the lack of housing facilities.

It took time to build and establish the permanent camps. In Louisiana by March 23, 1942, there was a permanent camp located near Alexandria named Camp Livingston with a capacity for 5,000 prisoners.[20] This camp was the first to serve the sugar parishes. Later, temporary camps closer to the source of the work were needed and the War Department made it possible to fulfill these needs. The War Manpower Commission set up rigid guidelines and minimum requirements for the establishment of these camps. At his own expense each employer was charged:

> To provide suitable buildings for kitchen and mess hall facilities for both the prisoners and guards. To provide buildings for lavatory facilities with the requirements of one shower per twenty men and one faucet for every fifteen men for both prisoners and guards. To provide water and electricity to the site of the camp.

The army leased the site of the temporary camp for one dollar a year. If an employer provided buildings for sleeping quarters for the prisoners of war and the guards, erected a fence around the buildings to be used by the occupants, furnished refrigeration units, and installed flood lights according to army requirements, a camp was more speedily built and the prisoners put to work much sooner.[21]

In the sugar parishes, many temporary camps were constructed in close proximity to the cane fields. In Lafourche Parish three such camps were put into operation from May to November, 1944. Located near Lockport, Mathews, and Thibodaux, the largest number of occupants housed at one time in these camps was on December 8, 1944. The Lockport camp had 167 German enlisted men, and Mathews camp had 238, and the Thibodaux camp had 621, totaling 1,026 men available for work in that parish.[22] The use of prisoner of war labor had been formerly recognized by international agreement in the Articles of the Geneva Convention of 1929 of which the United States was a signatory. Prisoners were restricted from producing or transporting arms and munitions or materials for combat units or in any degrading, unhealthful or hazardous work.[23]

The War Manpower Commission required a certification of need from the prospective employer, before considering the use of this type of labor. The reason for this prime requisite was to secure

(Continued on page 20)

---

[20] Lieutenant Colonel B. M. Bryan, Chief, Alien Division, to Major Orville E. Wilson, Mar. 29, 1942, National Archives and Record Service, Washington, D.C. This letter includes a listing of internment camps throughout the United States.

[21] War Manpower Commission, Region X, Regional Bulletin no. 337. *Utilization of the Services of Prisoners of War Labor.* April 13, 1944, pp. 7-9, National Archives

[22] Headquarters, Army Service Forces, Office of Provost Marshall General, Washington, D.C., *Weekly Report on Prisoners of War,* Dec. 8, 1944, National Archives.

[23] War Manpower Commission, Region X, Regional Bulletin no. 337. *Utilization of the Services of Prisoners of War Labor,* 1.

 (Continued from page 19)

evidence that the resident labor force had been completely utilized and exhausted. The commission refused to certify any need for prisoner of war labor until the following stipulations had been met:

1. That the nonavailability of resident labor is due to the exhaustion of local labor supplies and not due to the failure on the part of the requesting employer to adopt measures available to him to establish conditions of employment that would make labor available.
2. That all supplies of labor including secondary sources within the area from which workers normally came to perform work of the type in demand are exhausted.
3. That the employment of prisoners of war will not in any way impair the wages, working conditions and employment opportunities of resident labor or displace employed workers.
4. That the employer has placed a bona fide order with the Employment Service meeting the following conditions:
   a. contain no discriminatory specifications
   b. wage rates must not be less than the rate prevailing in the locality for similar work
   c. working conditions must be equivalent to those prevailing in the locality for civilian workers performing similar jobs.[24]

When the above specifications had been met, a certificate of need for employment was prepared which was sent to the commanding officer of the nearest prisoner of war camp. The employer was then informed that he would have to become certified before being permitted to enter into a labor contract with the War Department. Contracts, incidentally, were put into effect for periods not longer than three months.[25]

It should be noted here that these laborers received fair wages and treatment. The War Manpower Commission had established the amount of eighty cents for a normal day's work, based on the amount of work performed by the average, inexperienced free laborer at that time for a normal day. To encourage them to accomplish given jobs, an incentive pay and a task system were later put into effect. Under the incentive pay plan, hard workers were rewarded with increased pay while laggards received less pay. When a prisoner performed beyond the requirements he received eighty cents plus added pay for anything over the normal work day. The maximum amount that a prisoner could earn was one dollar and twenty cents a day under this plan. Under the task system the captives were assigned tasks to be completed within a specified time limit. They were informed of their daily assignment and what action would be taken for finishing earlier or falling behind. For performing the assigned task ahead of time, they would be allowed to return to their respective

(Continued on page 21)

[24] *Ibid.*, 5.

[25] *Ibid.*, 6.

camps before the actual end of a work day. Disciplinary action would be taken for continued failure to finish the assigned task.[26]

In the initial stages of this program there was a tendency to over guard the captive laborers. By late 1943, the ratio of guards to prisoners reached as high as one to one-and-one-half. As a result the prisoners could not be effectively used in this new capacity because of a lack of guard personnel.[27] Early in 1944, as a result of surveys and inspection tours by the inspector general, an order went out to establish smaller prisoner of war camps near critical work areas. This meant increased security hazards due to the lack of guards, but all officials involved were ordered to take a "calculated risk." This "calculated risk" was necessitated by an attempt to balance the chance of prisoners escaping against the needs of industry to supply needed goods and materials. A guard ratio of one guard to ten prisoners was recommended and temporary branch camps such as the three in Lafourche Parish were established.[28]

In order to obtain some first-hand information regarding POW labor in Lafourche Parish, this author conducted interviews with three persons who were directly involved in this unique program.

F. Ferdinand Price, a planter, had approximately 1,200 acres of sugar cane on his plantation near Thidodaux. Because of the draft, hiring by wartime industry in the immediate vicinity, and a lack of mechanization in the fields, he resorted to prisoner of war labor. Approximately forty German enlisted men were employed at one time on his plantation. The first group to arrive fortified Price's hesitancy about hiring this type of cane worker as they were hard-core Nazis who were arrogant and gave the German salute whenever he met them in fields. There were about eight or ten army guards assigned to this group with one of their noncommissioned officers in charge. Work orders had to go to him first and he, in turn, told the rest what to do. Even though arrogant, they performed their task of heaping the cane cut by a harvester to their employer's satisfaction. They worked less than a week and, with no advance notice, were transferred. The second group, skilled and well educated, worked better and apparently included fewer hard-core Nazis.[29] One had some mechanical engineering ability so he was put to work maintaining the tractors, and, according to the sugar planter, his tractors had never previously run as well.[80]

Regarding guard personnel, the first

(Continued on page 22)

---

[26] George G. Lewis, Lieutenant Colonel, MPC, United States Army, and John Mewha, Captain, Armor, United States Army, *History of Prisoner of War Utilization by the United States Army* 1776-1945. (Washington, 1955), 120-121.

[27] *Ibid.,* 115.

[28] *Ibid.,* 118.

[29] F. Ferdinand Price, private interview, Thibodaux, Louisiana, Sept. 21, 1971.

[30] In 1965 the former managing editor of this journal, Dr. Edwin A. Davis, met this man at an open air cafe in Fussen, Germany. With no trace of bitterness, he recounted many of his Louisiana experiences, including having been placed in charge of machinery maintenance on the plantation and of some handpicked German prisoners enjoying unguarded weekends in New Orleans. Later he was sent to a camp near Stuttgart, Arkansas, where he completed his nearly two-year imprisonment in the United States. During this period he gained a fair knowledge of the English language, enough to complete approximately two years of college work through correspondence courses from the Louisiana State University and the University of Arkansas. At the time of this chance European meeting, he was the head of a successful civil engineering firm in Cologne, Germany. Unfortunately, the notes taken on this prisoner have been lost.

 (Continued from page 21)

group was seemingly heavily guarded with about one guard to every five prisoners. The second group, apparently, was somewhat less heavily guarded. At one time Price saw a guard who had a stiff leg caused by a possible war wound hand his gun to the prisoners as he got on and off the transport truck. A count of cane knives and other implements, furnished by the planter, was taken by the guards at the beginning and end of the work day as a security precaution. Sandwiches for lunch were sent from the army's own mess-hall. The work day was from 6:00 a.m. to 3:00 p.m.

Employed under the task system, the POWs were permitted to leave the cane fields early when they completed their daily assignments. Price paid their wages to the government which, in turn, compensated the prisoners.

According to Price, the prisoners were friendly and on one occasion they invited him to visit their camp, which was in north Thibodaux, to view some Christmas decorations they had made. He described the camp as approximately five or six acres in area, with tents and barrack buildings surrounded by a ten- or twelve- foot fence with watchtowers and one main entrance.

In summary, sugar planter Price was generally pleased with the arrangement and with the POW's work performance during a crucial period. Without their labor, his crop could conceivably have been lost.[31]

Claude Lalande was an overseer in charge of the field work force for Valentine Sugars located just below Lockport, Louisiana. This plantation comprised approximately 1,653 acres of sugar cane land. The draft and war industries such as a shell plant in Thibodaux, and shipyards in the immediate vicinity had drained the community of potential cane workers. The pressing need here was assistance in heaping the cane for the loaders and cutting the crooked cane after the harvester had cut the top and bottom of the cane and laid it on the row. According to Lalande, the prisoners of war were obtained through the help of the American Sugar Cane League. Approximately 140 were used by Valentine Sugars at harvest time. The first group of captives were, in his opinion, "tough" and some of Hitler's best men. Those arriving were better and more friendly. Like Price, he worked them on the task system planting, cutting and heaping cane, and following the harvester and loader to make sure no cane was left in the fields. In the beginning, the work orders had to be interpreted through a noncommissioned officer, but subsequently Lalande was able to communicate directly with his workers to a limited degree.

In the camp located near Lockport Lalande recalled that prisoners were housed in a large two-story home owned by Valentine Sugars. A ten-foot fence surrounded it with four guardhouses or towers, one on each corner, and one main gate. The enclosure was lighted at night. There was a guard change every four hours. The guard personnel consisted of a captain and a lieutenant with about twenty-five or thirty enlisted men. Their duties included counting the prisoners when they left camp in the morning, and recounting them upon their return. The overseer noted that the guards usually assumed a more lax

(Continued on page 23)

[31] Price Interview, Sept. 21, 1971

attitude in the fields and let the prisoners work at their own pace. He added that he had no complaints to offer regarding the POW's work and that without them no cane would have been planted and the crop already planted would have been lost.[32]

The camp doctor at Valentine Sugars, Dr. Guy R. Jones of Lockport, provided some interesting insights on the subject. For a fee of one hundred dollars a month, paid by the federal government, he checked on the prisoners twice a day. As the government furnished only minor medicines such as aspirin, atropine and first aid supplies, he donated any additional medicines. Most of the prisoners, according to Dr. Jones, arrived in good health and remained so.

In his capacity as camp physician Jones got to know his patients fairly well. They didn't object to their assigned tasks because they knew the Americans were complying with the articles of the Geneva Convention. Most of them were talented and well educated. In fact, one prisoner spoke seven languages and acted as an interpreter for the camp. Though captured and confined to a prison camp, Dr. Jones observed that they remained loyal to Hitler and confident of an ultimate German victory. He added that the prisoners were fed sufficient quantities of meat, butter and fresh vegetables at a time when rationing was limiting the civilian's ability to purchase such commodities.[33]

In conclusion, none disputed that the employment of German prisoners of war in the cane fields of Lafourche Parish in 1943-44 was productive and effective. The program which evolved through the cooperative efforts of the American Sugar Cane League, the federal government and the sugar industry, made a substantial contribution to the nation's war effort as well as to the civilian economy. Coincidentally, the cost of housing, guarding and feeding thousands of prisoners of war was partially defrayed through their labors.

---

[24] Claude Lalande, private interview, Lockport, Louisiana, Oct. 1, 1971.

[25] Dr. Guy R. Jones, private interview, Lockport, Louisiana, Sept. 29, 1971.

CLASSIFIED

FOR SALE: 1988 Cameco 2-Row Harvester. 4386 Intl 4WD Tractor. 20-8-38 Tires. Call (318) 364-8903 (day) or (318) 365-5036 (night).

Interested in buying a sugar cane farm operation. Mike Cremaldi, 2431 Main St., Patterson, LA 70392, (504) 395-6980, call after 5:30 pm.

FOR SALE: 1985 Cameco 2-Row Harvester cab and air. 1 year warranty left on engine. Inquiries call (318) 229-4988, leave message and will return.

FARM NOTES *(Continued from page 7)*

follow on Thursday afternoon, followed by the normal social hour and banquet. The meeting will continue on Friday, February 15, with a technical agricultural session. The program should once again be interesting and informative and all growers and processors are encouraged to attend. If you are currently not a member of ASSCT you can pay the dues of $10.00 per year at the registration desk during the meeting. Membership in ASSCT gives you voting privileges for this organization, it allows you to be a member of the technical organization that represents this industry and provides you with the written journal of the scientific papers presented at this and the joint meeting held during the summer with the Florida Division. Further information can be obtained from Dalton Landry, Secretary-Treasurer for the Louisiana Division of ASSCT at his office in Knapp Hall (LSU) in Baton Rouge or from this author at the League Office in Thibodaux.

For efficiency & Accuracy in Precision grading Consider the purchase of a

Lazerplane

by

Spectra-Physics

- Shorten your completion time
- reduce manhours per project
- easy to operate
- Eliminates costly overcutting

contact

ALLEE, ALLEE & ALLEN, Agent
P.O. BOX 108
ST. JAMES, LA 70086
504/265-3965

SOUTHERN AGRIBUSINESS FORUM

The Southern Agribusiness Forum, sponsored by the Agribusiness Council of New Orleans, the Agribusiness Committee of Memphis and Jackson Chamber of Commerce, will hold its forty-fourth annual meeting in Jackson, Mississippi on January 24, 1991. This meeting is held annually to bring speakers and topics of regional and national importance to agribusiness constituents in the area served by the coordinating organizations. This year the theme of the meeting will be "The Changing Framework Surrounding Mid-South Agriculture." Sessions will be held concerning new regulations which affect landowners, the Gulf of Mexico Program, a panel discussion on the Costs and Benefits of Wildlife and Agriculture and the California Initiative commonly known as Big Green. The Big Green issue which was recently defeated in California would have had far reaching effects on the use of farm chemicals in that state. This issue will certainly resurface not only in California but probably in other areas as well. This discussion should prove to be very informative. The speaker for that one session will be Arthur Lawyer who played a large role in efforts to defeat that initiative. Sugar industry members are encouraged to attend this meeting. Further information concerning registration costs and accommodations can be obtained from this author at the League Office.

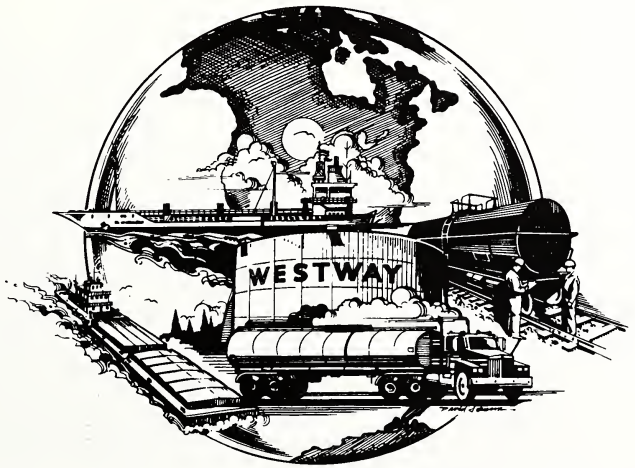
 (Continued from page 10)

the mill involved. In this case no further laboratory data is taken but the data is analyzed in more detail to extract the critical information. However, this does prompt special analysis and improvement of factory operation, for example, increased footing crystal contents.

In some cases special analytical systems are required to obtain the necessary information, especially where low concentrations or small differences are involved. This is particularly the case for sugar losses due to inversion or physical losses in wash water, etc. Many new analytical tools are becoming available and we hope to keep the industry informed of those which may have application in the factories.

The boiling house data evaluation shows that there is a need for extraction of data from available sources and the largest source of information is the core laboratory / cane quality system. Although the comparison of different mills is not always easy due to variations in practice, there are statistical systems which allow comparison of trends and differences. These could be used to compare variety performance, harvesting and transportation systems, agronomic practices, effects of weather conditions, and so on. Some additional information would be necessary but all the analytical data is at hand. A sophisticated statistical approach would be required but it would put to further use all the years of information available.

As this year ends, I wish to thank the American Sugar Cane League for the opportunity to put my thoughts in print and to thank also the mills which have given me the opportunity to work in them during this season. Holiday greetings and best wishes for the New Year to all in the industry.



Westway Trading Corporation is celebrating its 50th year in business as a world leader in the marketing and distribution of molasses and related products. We would like to express our gratitude to our many suppliers, customers and service companies that have worked with us over these many years. Westway Trading Corporation is devoted to further development of established business and expansion into new areas. We very much appreciate your support and look forward to working with you during the next fifty years.

50th Westway TRADING CORPORATION 1940-1990

228 St. Charles Ave., Suite 700, New Orleans, La. 70130, 504-525-9741

District III, Group 3: 100-200 acres

(Raceland) — Denis Knobloch Jr. (left) with Lafourche Extension agent Mike Hebert won his sixth high yield award, taking the top honor in group 3 for farms between 100 and 200 acres. Knobloch harvested an average of 8,875 pounds of sugar per acre off 153 acres during the 1989 season. Denis has been producing sugarcane and working on the same plantation for 19 years.

District III, Group 4: 200-500 acres

(Thibodaux) — The Acosta brothers have won their fifteenth high yield award, taking the honor once again in group 4, for farms between 200 and 500 acres. From left to right are Manuel, Percy (standing) and Bobby Acosta with Lafourche Extension agent Mike Hebert (standing). The brothers harvested an average of 8,407 pounds of sugar per acre off 480 acres during the 1989 season. They have been producing sugarcane for 25 years.

District III, Group 5: 500-1,000 acres

(Labadieville) — Bull Run Farms won its first high yield award, earning the top honor in group 5, for farms between 500 and 1,000 acres. The three brothers who handle the operation are (from left to right) Danny, Bruce and Bobby Boudreaux, with Terrebonne Parish Extension Agent Barton Joffrion. The brothers harvested an average of 8,392 pounds of sugar per acre off 690 acres during the 1989 season. They have worked on the farm for four years, but have been producing sugarcane for 15 years.

District III, Group 6: 1,000-2,500 acres

(Schriever) — Godfrey Knight (left) with Lafourche Parish Extension agent Mike Hebert won his first high yield award, earning the top honor in group 6, for farms between 1,000 and 2,500 acres. Knight harvested an average 6,991 pounds of sugar per acre off 1,685 acres during the 1989 season. Godfrey has owned his own farm and been producing sugarcane for 28 years.

District III, Group 7: 2,500 and more acres

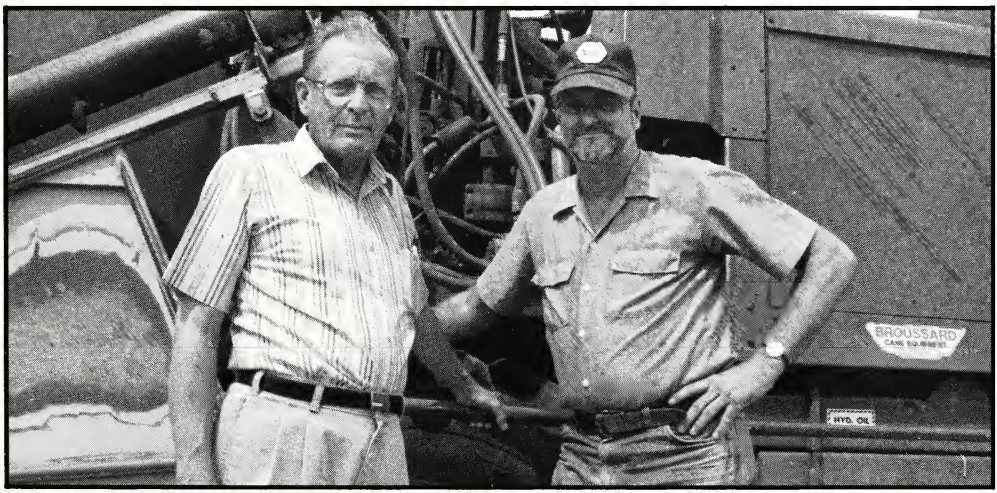
(Raceland) — Southcoast Sugars Inc. won its tenth high yield award, capturing the top honor in group 7, for farms of 2,500 or more acres. With Lafourche Extension agent Mike Hebert (left) representing South Coast are Danny Broussard, Robert Gautreaux and Norris Matherne (far right). This is the eighth consecutive year Southcoast has earned first place. The farmers harvested an average 6,540 pounds of sugar per acre off 3,858 acres during the 1989 season. The company has produced sugarcane for 97 years.

District IV, Group 1: 5-50 acres

(Donaldsonville) — James Acosta (left) with Ascension Parish Extension agent Bill Davis won his first high yield award. He took the top honor in group 1, for farms between five and 50 acres. Acosta harvested an average 7,457 pounds of sugar per acre off 14 acres during the 1989 season. James owns the 30-acre farm on which he has been producing sugarcane for 46 years.

District IV, Group 2: 50-100 acres

(Vacherie) — M. Rodrigue and Sons won its fourth high yield award in group 2 for farms between 50 and 100 acres. Pictured are Harold (left) and Jerry Rodrigue (right), with St. John Parish Extension Agent Larry Brock (center). The farm yielded 7,650 pounds of sugar per acre off 84 acres during the 1989 season. They have been farming this land and producing sugarcane for the past 28 years. The family also won the top honor for its larger plantation in St. James Parish.



District IV, Group 3: 100-200 acres

(White Castle) — Nolan Himel, Jr. (right), with Iberville Parish Extension Agent Louis Favaron, won his third high yield award by taking the top honor in group 3, for farms between 100 and 200 acres. Himel harvested an average 6,738 pounds of sugar per acre off 107 acres during the 1989 season. He owns his 180-acre plantation on which he has been producing sugarcane for 24 years.

District IV, Group 4: 200-500 acres

(Paulina) — Yolande Schexnayder won his second high yield award by earning the top honor in group 4, for farms between 200 and 500 acres. Pictured are Yolande (left) and Wade Schexnayder (right), with St. James Parish Extension Agent Jim Garrett (center). The Schexnayder family operation harvested an average 7,895 pounds of sugar off 458 acres during the 1989 season. Yolande has been producing sugarcane on the farm he owns for 55 years.

District IV, Group 5: 500-1,000 acres

(Vacherie) — M. Rodrigue and Sons won its fifth high yield award in group 5 for farms between 500 and 1,000 acres. Pictured is Harold (left) and Jerry Rodrigue (right), with St. James Parish Extension Agent Jim Garrett. The farm yielded 7,310 pounds of sugar per acre off 512 acres during the 1989 season. The family also won the top honor for its smaller plantation in St. John Parish.

District IV, Group 6: 1,000-2,500 acres

(Plaquemine) — St. Louis Planting Inc. won its second high yield award by earning the top honor in group 6, for farms between 1,000 and 2,500 acres. Brothers Price (left) and John Gay (right), with Iberville Parish Extension Agent Louis Favaron (center), harvested an average 7,052 pounds of sugar off 1,365 acres during the 1989 season. Favaron remarks, "John and Price have done an excellent job in improving their production. In addition, these two young men are now taking an active leadership role in the sugar industry."

District IV, Group 7: 2,500 and more acres

(New Roads) — Joe Beaud, Jr. (right) with Pointe Coupee Cooperative Extension Agent Miles Brashier won his third high yield award, taking the top honor in group 7, for farms 2,500 or more acres. Beaud harvested 5,534 pounds of sugar off 2,554 acres during the 1989 season. Joe is part owner of the land he's been farming for the last 15 years.

Commercial Members of the
AMERICAN SUGAR CANE LEAGUE
OF THE U.S.A., INC.

ASSUMPTION BANK & TRUST CO.
P.O. Box 398 Napoleonville, LA 70390

THE BARTLETT COMPANY
Chemical Brokers
4955 River Road
P.O. Box 10710
Jefferson, LA 70181

THE CROPMATE COMPANY
Fertilizer Region
P.O. Box 28 Thibodaux, LA 70302

CAMECO INDUSTRIES, INC.
P.O. Box 968 Thibodaux, LA 70301

FIRST COMMERCIAL BANK
521 Main St. Franklin, LA 70538

DUPLANTIER, HRAPMANN,
HOGAN, & MAHER
Certified Public Accountants
821 Gravier Suite 1300
New Orleans, Louisiana 70112

ESTES REFRACTORY
P.O. Box 94 Jeanerette, LA 70544

THE FIRST NATIONAL BANK
IN DONALDSONVILLE
P.O. BOX 108 Donaldsonville, LA 70346

F. C. SCHAFFER & ASSOCIATES, INC.
1020 Florida Blvd.
Baton Rouge, LA 70802

GULF ENGINEERS & CONSULTANTS, INC.
535 Main Street
Baton Rouge, LA 70802

WESTWAY TRADING CORP.
228 St. Charles Ave., Suite 700
New Orleans, LA 70130

NADLER, INC.
P.O. Box 359
Plaquemine, LA 70765

NATIONAL BANK
FOR COOPERATIVES
Jackson Region
1800E, County Line Road
P.O. Box 16099
Jackson, MS 39236

OUACHITA FERTILIZER
Route 7, Box 49-F
New Iberia, LA 70560

DRAVO LIME COMPANY
Pelican State Division
12797 Scenic Highway
Baton Rouge, LA 70807

SELF INSURANCE ADMINISTRATORS
P.O. Box 11509
New Iberia, LA 70562-1509
A Member Company of Huval Insurance Group

FIRST SOUTH PCA
P.O. Box 667 Thibodaux, LA 70302
P.O. Box 10908 New Iberia, LA 70562

STANDARD SUPPLY & HARDWARE
CO., INC.
P.O. Box 60620 New Orleans, LA 70160

ST. MARY BANK & TRUST CO.
Franklin, LA 70538

LOUISIANA CANE MFG., INC.
P.O. Box 71 Thibodaux, LA 70301

WHITNEY NATIONAL BANK
228 St. Charles Avenue
New Orleans, LA 70130

RAYNE STATE BANK
AND TRUST COMPANY
P.O. Box 99
Duson, LA. 70529

3-D CHEMICAL, INC.
P.O. Box 607
St. Martinville, LA. 70582

J.I. CASE
P.O. Box 171818
Memphis, TN 38187-1818

Sugar Bulletin
E. Bayou Rd.
bodaux, La. 70301

BULK RATE
U.S. POSTAGE
PAID
PERMIT NO. 43
Thibodaux, La.

SERIALS DEPT.
LOUISIANA STATE UNIV.
LIBRARY
BATON ROUGE LA 70803

The Sugar Bulletin

OFFICIAL BULLETIN OF THE AMERICAN SUGAR CANE LEAGUE OF THE U.S.A.

ANNOUNCING THE

SIXTY-EIGHTH ANNUAL MEETING

OF THE

AMERICAN SUGAR CANE LEAGUE

OF THE

U.S.A., INC.

WEDNESDAY, FEBRUARY 27, 1991 — 2:00 P.M.
HOWARD JOHNSON LODGE
201 N. CANAL BLVD., THIBODAUX, LOUISIANA

REGISTRATION BEGINS AT 1:00 P.M.

At this Meeting there will be an election of Members of the Board of Directors to serve during the ensuing year.
Immediately following the Annual Meeting, the American Sugar Cane League Foundation will hold a meeting to elect a Board of Directors.
All Members of the League Will Please Consider This as an Official Notice to Attend

Vol. 69 — No. 5 FEBRUARY 1, 1991

The Sugar Bulletin

The Official Organ of the American Sugar Cane League of the U.S.A., Inc.

P. J. deGravelles, Jr., Editor and General Manager
Charles A. Richard, Ph.D., Director of Research and Field Representative
Windell R. Jackson, Senior Agronomist
Herman Waguespack, Jr., Agronomist
John Constant, Business Manager
Nannette B. Nickens, Office Secretary
Paul G. Borron, III, Legal Counsel

Washington Representative:
Wallace and Edwards, Inc.
1150 Connecticut Avenue, N.W.
Suite 507
Washington, D.C. 20036
Phone: (202) 331-4331

Baton Rouge Representative:
Spradley and Spradley
6216 Riverbend Boulevard
Baton Rouge, LA 70820
Phone: (504) 766-1359

Editorial and Executive Office:
206 E. Bayou Rd., Thibodaux, LA. 70301
Phone: (504) 448-3707

OFFICERS AND MEMBERS OF THE BOARD OF DIRECTORS OF THE AMERICAN SUGAR CANE LEAGUE

William S. Patout, III, Jeanerette, LA
President
Dr. Daniel Viator, Youngsville, LA
1st Vice-President
P. J. "Pete" deGravelles, Franklin, LA
Vice President — General Manager
Don Wallace, Washington, DC
Vice President — Government Relations
Patrick Cancienne, Belle Rose, LA
Treasurer
Irving Legendre, Jr., Thibodaux, LA
Secretary

Pat Accardo, Franklin, LA
Bryan Allain, Jeanerette, LA
J. G. Beaud, Jr., New Roads, LA
Bert Beyt, Jeanerette, LA
Ramon E. Billeaud, New Orleans, LA
Felix Blanchard, New Iberia, LA
Ronald Blanchard, Napoleonville, LA
Neal Bolton, St. James, LA
Joseph E. Boudreaux, Thibodaux, LA
Fred Y. Clark, Franklin, LA
Lawrence Dugas, New Iberia, LA
Dan Duplantis, Raceland, LA
Paul Ellender, Bourg, LA
John F. Gay, Plaquemine, LA
Ronald Gonsoulin, New Iberia, LA
Mike Graugnard, Edgard, LA
Warren Harang, III, Donaldsonville, LA
Roddy Hulett, St. Martinville, LA
Bobby Judice, Franklin, LA
Kenneth Kahao, Port Allen, LA
Denis Lanaux, Killona, LA
Melvin Landry, New Iberia, LA
D. C. Mattingly, Paincourtville, LA
Jerry McKee, Thibodaux, LA
Kenneth Peltier, Thibodaux, LA
R. L. Roane, Jr., Jeanerette, LA
Howard Robichaux, Labadieville, LA
Raphael Rodriguez, Franklin, LA
Mel Schudmak, White Castle, LA
Frank Sotile, Donaldsonville, LA
David Stewart, Lakeland, LA
Roland Talbot, Thibodaux, LA
Jackie Theriot, Breaux Bridge, LA
James Thibaut, Donaldsonville, LA
Glenn Timmons, Brusly, LA
Eugene Woods, Paincourtville, LA

HONORARY MEMBERS

Joseph G. Beaud, Sr., New Roads, LA
Charles Billeaud, Broussard, LA
Paul G. Borron, Jr., Plaquemine, LA
Jerry L. Dickson, New Orleans, LA
Gilbert J. Durbin, New Orleans, LA
F. Evans Farwell, New Orleans, LA
J. N. Foret, Jr., Thibodaux, La.
Andrew Gay, Plaquemine, LA
F. A. Graugnard, St. James, LA
Warren J. Harang, Jr., Thibodaux, LA
Lloyd Lauden, New Orleans, LA
E. W. McNeil, Brusly, LA
J. Randolph Roane, Jeanerette, LA
Charles C. Savoie, Belle Rose, LA
Edward T. Supple, Bayou Goula, LA
E. Berkshire Terrill, Brusly, LA
John Thibaut, Napoleonville, LA
M. V. Yarbrough, Fort Smith, Ark.

MAXXUM™

One of the most durable parts on a MAXXUM tractor is made of paper.

Everything on the new Case International MAXXUM tractors is designed to last, including the 5-year, 5,000-hour warranty on the *entire* tractor.* That's the best warranty in the business, by far.

It just goes to show how much Case International believes in the durability and reliability of MAXXUM tractors.

What makes the MAXXUM tractor so durable? It comes equipped with one of three proven Case International diesel engines. They're durable, dependable and guaranteed to deliver both high torque rise and high fuel economy. You can feel confident knowing that more than 250,000 similar engines are in use around the world. Count on them to perform — trouble-free — for thousands and thousands of hours.

Come in to see the Case International line of MAXXUM tractors today.

* Excluding tires, which are covered by their own manufacturer's warranties. A $200 deductible applies to each repair after the first year. ªJI Case Company 1989

Switzer Sales and Service
Jeanerette, LA
(318) 276-6384

Gremillion's, Inc.
New Roads, LA
(504) 638-6347

Lanier Int'l. Inc.
Abbeville, LA
(318) 893-1988

Lemann's Farm Supply Inc.
Thibodaux, LA
(504) 447-3776

Baton Rouge, LA
(504) 357-6453

Donaldsonville, LA
(504)473-7927

caseih

UP FRONT WITH THE LEAGUE

By P. J. deGravelles, Jr.

The Sixty-Eighth Annual Meeting of the American Sugar Cane League will be held on Wednesday, February 27, 1991, at the Howard Johnson Lodge in Thibodaux, Louisiana. Registration will begin at 1:00 p.m. and the meeting will be called to order by President William Patout, III at 2:00 p.m.

The first order of business will be nominations and election of the Board of Directors for the ensuing year. Following the election will be reports from the Finance Committee, Legislative Committee and Research Committee. Any other business to come before the general membership will be considered before adjourning.

The Board of Directors and Staff of the League urge your attendance and solicit your input at the annual meeting.

Report of the Nominating Committee. The following were nominated by the committee to serve on the American Sugar Cane League Board of Directors beginning February 27, 1991.

GROWER MEMBERS

Manuel Acosta
Bryan Allain
J. G. Beaud, Jr.
Ramon Billeaud
Lawrence Dugas
John Gay
Ronald Gonsoulin
Warren Harang, III
Robert "Bobby" Judice
Roger Kahao
Denis Lanaux
A. J. LeBourgeois, Jr.
Jerome McKee
Howard Robichaux
Raphael Rodriguez
Frank Sotile
Roland Talbot
Carlton Townsend
Daniel Viator
Eugene Woods

PROCESSOR MEMBERS

Branan "Bert" Beyt
Felix "Gus" Blanchard
Ronald Blanchard
F. Neal Bolton
Patrick Cancienne
Dan Duplantis
Camille "Mike" Graugnard
J. R. "Roddy" Hulett
Melvin Landry
Irving E. Legendre, Jr.
D. C. Mattingly
William S. Patout, III
Kenneth Peltier
Stanley "Stan" Pipes
R. L. "Bobby" Roane
Mel Schudmak
David Stewart
Jackie Theriot
Charles Thibaut
Glenn Timmons

WASHINGTON UPDATE WITH DON WALLACE

SECRETARY YEUTTER TO BECOME HEAD OF RNC

White House spokesman Marlin Fitzwater announced on January 7 that U. S. Department of Agriculture Secretary Clayton Yeutter was President Bush's choice to become the chairman of the Republican National Committee. "Yeutter is aggressive, outgoing, friendly and will be a great debater in the campaigns ahead," Fitzwater said. Yeutter has not held elective office, but did serve as chairman of Farmers for Nixon and has made numerous campaign appearances for Republican candidates. He also served as the U.S. Trade Representative in the Reagan administration and became Bush's Agriculture Secretary in 1989.

The Republican National Committee is scheduled to meet January 25 and is expected to approve Bush's nomination.

Several Republicans have expressed an interest in becoming the next Agriculture Secretary. The most direct indication was made by Representative Edward R. Madigan of Illinois, the senior Republican on the House Agriculture Committee, who sent a letter to the White House stating his interest. Several others have also put out the word that they would like to succeed Yeutter. The list includes former Senator Rudy Boschwitz (R.-Minn.), the only Senate incumbent defeated in the November elections; Deputy Agriculture Secretary Jack Parnell; Dean Kleckner, president of the American Farm Bureau Federation; and Assistant Agriculture Secretary Jo Ann Smith; Representative E. Thomas Coleman (R-Mo.), who also sits on the House Agriculture Committee; and two former GOP representatives Bill Grant of Florida and Cooper Evans of Iowa. Representative Ron Marlenee (R-Mont.) is also said to be interested especially since Montana is expected to lose one of its House seats as a result of the 1990 census count and Marlenee would be running against Representative Pat Williams, a Montana Democrat from the first district, in a very expensive and tough campaign.

A senior administration official said that Yeutter is not expected to formally leave the Department until March 1 and "the choice of his successor is probably weeks off."

NEW MEMBERS APPOINTED TO HOUSE AND SENATE AGRICULTURE COMMITTEES

Eight congressmen, all freshmen, have been nominated to fill vacancies on the 45-member House Agriculture Committee for the 102nd Congress. The selections were made and released by the Democratic Steering and Policy Committee and the Republican Committee on Committees, and must be ratified by the party and the full House of Representatives. New Democratic members are Calvin Dooley of California, Mike Kopetski of Oregon, and Collin C. Peterson of Minnesota. New Republican members (tentative) are Wayne Allard of Colorado, Bill Barrett of Nebraska, John A. Boehner of Ohio, Dave Camp of Michigan and Jim Nussle of Iowa.

Agriculture Committee members from the 101st Congress not returning to the Committee include Clyde Holloway (R-La.), a member of the Cotton, Rice and Sugar Subcommittee, switched to the Energy and Commerce Committee, Roy Dyson (D-Md.) defeated

(Continued on page 6)

WASHINGTON UPDATE

(Continued from page 5)

for reelection; H. Martin Lancaster (D-N.C.), temporary appointment lapsed; Claude Harris (D-Ala.), switched to Energy and Commerce Committee; Arlan Stangeland (R-Minn.), defeated for reelection; Bill Grant (R-Fla., defeated for reelection; Bill Schuette (R-Mich.), defeated in his Senate attempt; and Fred Grandy, (R-Ia.), switched to the Ways and Means Committee.

For the Senate Agriculture Committee changes are minor for the 102nd congress. Two Republicans have been named to the committee, freshman Senators John Seymour of California (succeeding Senator Pete Wilson who was elected Governor of California) and Larry Crait of Idaho. Potential changes in Democratic membership as a result of moves to other committees may not be decided until later in the month. Senate Agriculture committee members not returning from the 101st Congress are Wilson, Rudy Boschwitz (R-Minn.), defeated for reelection; and Slade Gorton (R-Wash.), switched to the Senate Appropriations Committee.

RESUMPTION OF URUGUAY ROUND NEGOTIATIONS

The Trade Negotiating Group met on January 15 in Geneva to resume the Uruguay Round of multilateral trade negotiations. Another meeting of the group will reportedly take place before February 1. U.S. Agriculture Secretary Clayton Yeutter has said that the administration remains hopeful that an agreement will be reached by the end of February and that the situation is "not as gloomy as it appears on the surface." Yeutter, who spoke at a conference organized by "The Atlantic" Magazine, said that he has been encouraged by reports that the EC Commission is considering possible changes in the EC's Common Agricultural Policy (CAP), which could have a positive impact on the talks. The EC Commission has scheduled a meeting for January 19-20 to discuss proposals aimed at reforming the CAP being put forward by EC Agriculture Commissioner Ray MacSharry. Yeutter warned the EC against allowing its internal deliberations to drag on because of the March 1 deadline the administration faces to send an agreement to Congress or to seek an extension of its "fast-track negotiating authority" under which Congress would approve an agreement emerging from the Uruguay Round without amendment.

Also of interest, a hearing has been scheduled by the Senate Agriculture Committee on Thursday, January 17 at 2:00 p.m. Yeutter and U.S. Trade Representative Carla Hills are scheduled to testify on the ongoing GATT negotiations.

REBECCA DAVIS TO MOVE TO CALIFORNIA

Rebecca Davis, longtime assistant to Don Wallace and Macon Edwards will move to California in early February. Rebecca's husband, Mark, who has served as a speech writer for President Bush, will become a top advisor to Governor Pete Wilson of California. Rebecca and Mark will live in Sacramento.

In the ten years Rebecca has been associated with Wallace and Edwards, she has been an integral part of the firm's operations and has worked closely with the ASCL on legislative and

(Continued on page 17)

PLANTING IS YOUR BUSINESS

OUR BUSINESS IS YOUR PLANNING
AND HOW YOU GROW FINANCIALLY

A. A. HARMON & CO.
(A Corporation of Certified Public Accountants)
Professionals in Planning for:

Cash Flow	Accounting	Taxes
Retirement	Computerization	Estates

311 Baronne Street, New Orleans, Louisiana 70112
Call collect — Glenn V. Weick or David M. Bassemier
(504) 586-0581

GOODYEAR

SPECIAL
SURE-GRIP TD-8

GOODYEAR TIRES FOR YOUR CAR, TRUCK, FARM OR OFF HWY. EQUIPMENT

- 24 HR. ROAD SERVICE
- COMPLETE AUTOMOTIVE CERTIFIED SERVICE
- TRUCK TIRE BALANCE AND ALIGNMENT

NOBODY FITS YOU LIKE GOODYEAR

SUPER TRACTION • SUPER STRENGTH

GENERAL ELECTRIC AUTHORIZED DEALER

7:30 AM - 6:00 PM MON. - FRI.
7:30 AM - 1:00 PM SAT
1203 ST. PATRICK HWY
THIBODAUX

PIT STOP
YOUR ON FARM SERVICE SPECIALIST

GOODYEAR AUTO SERVICE CENTER
1-800-256-1269 (504) 447-2696

FARM NOTES By Dr. Charley Richard

1990 YIELD RESULTS/SNOW COVER — SEED CANE QUESTIONNAIRES — RAINY SEASON THANKS TO OUR COOPERATORS

On December 25, 1990, St. Mary Stugar Cooperative ground the last of its cane thus completing Louisiana's grinding season for 1990. Because of the damaging freeze which occurred during December of 1989, the production values for 1990 will be considerably lower than that of prior years. In addition to the freeze that killed cane eyes and reduced stands extensive rainfall during the first few months of 1990 caused additional damage to the crop. Early 1990 estimates placed the crop at some 30 to 40% of the 1989 crop. However, unusually favorable growing conditions during September, October and November of 1990 added substantial weight to the cane stalks. Preliminary tonnage and sugar production figures for the 1990 crop are seen in the table below and can be compared to the 1989 crop and an average of the past three crop years.

1990 YIELD COMPARISONS

HARVESTED YIELD CATEGORY	1989	AVERAGE OF 1987-88-89	1990	1990 ¢ OF 3 YR. AV.
ACRES	294,00.0	279,000.0	192,000.0	69
GROSS TONS	8,329,000.0	7,585,000.0	4,648,000.0	61
SUGAR PER TON r.v.	207.0	214.0	190.0	89
TOTAL SUGAR r.v.	864,000.0	809,000.0	441,000.0	55
SUGAR/ACRE	5,878.0	5,800.0	4,594.0	79
TONS OF CANE/ACRE	28.3	27.1	24.2	89

These production values reflect what the state was able to produce following the most devastating freeze to hit the industry this century. One must go back to 1899 to find a weather related catastrophe which caused as serious a decline in production as seen in the 1990 crop. However, production on a state level does not tell the whole story since the entire industry was not equally damaged by the freeze. League agronomists and others who travel the industry had predicted that yields would be better in those areas that had a protective snow cover preceding the December 1989 freeze. A map of the industry indicates that cane tonnage ground in 1990 by those mills in areas which had a snow cover averaged some 75% of the 1989 crop. Cane ground in 1990 by mills in areas that had little or no snow cover (north of Napoleonville along Bayou Lafourche, north of St. James along the Mississippi River, and west of Jeanerette along Bayou Teche) averaged only some 45% of the cane ground in 1989. There appeared to be little difference between the eastern and western sides of the belt and instead the big difference seems to be whether production was north or south of the east-west snow line.

Although the production values for 1990 are alarmingly low, they do indicate

(Continued on page 13)

First South
Production Credit Association

Farmer Owned Since 1934

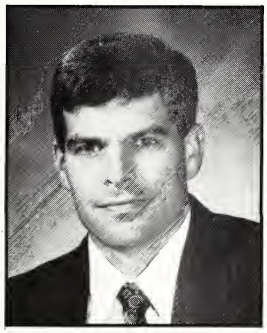
Experienced and Knowledgeable Agricultural Lender

Offices in New Iberia and Thibodaux

Thibodaux

DEAN MARTIN
Loan Officer
(504) 446-9450

Thibodaux



ANDY ANDOLSEK
Loan Officer
(504) 446-9450

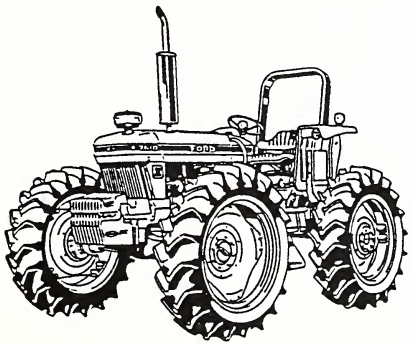
New Iberia

PATSY CHAMPAGNE
Loan Officer
(318) 364-0217

FORD MODEL 7610 MUDDER CANE SPECIAL

86 PTO HORSE POWER
3 PT. LIFT CAPACITY • 4435 LBS.
DUAL HYDRAULIC REMOTES
4 WHEEL DRIVE - SHIFT ON THE GO
540/1000 RPM PTO
4 - 13.6 X 38 R2 TIRES
OVER 31^{N} GROUND CLEARANCE

PRICED TO SELL
OUT OF TOWN CALL TOLL FREE



1-800-969-0068

M & L INDUSTRIES INC.
1210 ST. CHARLES ST.
HOUMA, LA 70360
PHONE (504) 876-2280

The Baton Rouge Line

By Tom and Linda Spradley

The coming year will be fraught with change, as state legislators and statewide office holders face reelection, and reapportionment takes hold. The turnover in the Legislature alone could be as high as 50 percent.

This provides the sugar industry with a unique opportunity. As a relative newcomer to state legislative matters, the American Sugar Cane League can play a role in electing representatives that have similar philosophies on issues of importance to the League. To accomplish this end, the League plans to form a PAC, the "SugarPAC", for state legislative races.

The SugarPAC will be organized on a regional basis so that members will have an opportunity to provide input as to which individuals should be endorsed for election. Candidates will be interviewed by the regional PAC responsible for that election district. Based on these interviews and any other relative information, a recommendation will be made with regard to which candidate should be endorsed by the League.

New campaign finance laws passed by the Legislature in 1988 have changed the rules of the game. The most a state legislature can receive from all PAC's is $35,000. This does not create a problem for rural races but it will affect "media market" races where a state legislative race can cost upwards of $250,000. What this means is that these races will have to develop creative ways to campaign since they will no longer be able to depend in large part on PAC's for financing.

Additionally, the most that a PAC or individual can contribute to a candidate for a state legislative office is $2,500. Since this is more than the SugarPAC will likely contribute to any one candidate, it should not create a problem for us.

The Governor's race also will provide a lot of interest, what with the possibility of former Gov. Edwards entering the race to run against Gov. Roemer, currently favored in most polls for reelection. Also in the race are Aaron Broussard, Louis Lambert and David Duke (although he is expected to withdraw down the road), with Paul Hardy and Dave Treen waiting in the wings.

As a result of Louisiana's decreased population, one congressional district will be eliminated. At this time, it appears that Clyde Holloway's district is most likely to be carved up and reapportioned amongst other districts. Holloway is looking at his options, and has mentioned the possibility of running for Governor, running for Congress in another district, or running against John Breaux for U.S. Senate in 1992. He also has stated that he might propose his own plan for reapportionment.

The loss of a congressional district also will cause about 21 state agencies to be restructured because, in most cases, one or more board members come from each congressional district. The Legislature could address this situation in one of several ways, including simply reducing the size of the boards from eight to seven members, basing membership on the districts of the BESE Board, or abolishing the boards outright.

The House and Governmental Affairs Committee will begin to remap the 105 House districts in mid-February, based on the new census data. A special Legislative Session will be held in early April to determine new House, Senate and BESE districts for the October state elections. The remapping of the Congressional and PSC districts will take place during the regular session.

IN THE FACTORY

CENTRIFUGAL AND NON-CENTRIFUGAL SUGAR

Stephen J. Clarke
Audubon Sugar Institute
Louisiana Agricultural Experiment Station

The sugar with which we are familiar and is the commodity of large scale national and international trade is centrifugal sugar. The crystalline sugar is separated from the mother liquor by centrifugals to give a higher purity sugar and lower purity molasses. In the early days of sugar manufacture, until the middle of the nineteenth century, sugar was separated from molasses by drainage. The massecuite (mixture of crystals and mother liquor produced by boiling off water) was packed into barrels or conical vessels with holes drilled into the sides and bottom. In some parts of the world this is still practiced for the production of "loaf sugar", but for commercial sugar production this has been superceded by the centifugal.

In 1837, Hardman patented the use of centifugal force as a means of separating sugar from the mother liquor. The machine proposed was a basket carried on a vertical shaft, rotating in rigid bearings, with overhead belt drive. From this simple start, the modern high speed centrifugal has developed and today, large fully automatic batch and continuous machines are in routine use. The belt driven centifugal, usually in a battery of machines driven by a single steam engine or electric motor, was most common. Also used were suspended water driven centrifugals which had fewer moving parts sugject to wear than the belt driven. Two nozzles directed the water jets against the wheel cups, with the water pressure being in the range 150 to 200 psi. Few centrifugals were individually electrically driven, the standard practice today.

It is interesting to compare the number of centrifugals used in the past with the present requirements. There is not a great deal of readily available information on this subject but we do have data for Hawaii sixty years ago. In Hawaii in 1931, producing a total of about four thousand tons of sugar per day, there were 796 centrifugals, 661 belt driven, 124 water driven and 11 individually electrically driven. On average this is about five tons of sugar per machine per day, if we lump together the high and low grade machines. Of these, 570 were used on low grades and 226 on commercial sugar, less than twenty tons of sugar per day for each high grade machine. In Louisiana in 1991, producing about twelve thousand tons of sugar per day, there are installed 98 machines for high grade massecuite, equivalent to about one hundred and twenty tons of sugar per day, and 81 machines for low grade massecuite. Of course this is installed capacity, not all of which is used all the time. These numbers do, however, give a measure of how much the technology has improved over the last sixty years. New machines (both batch and continuous) have already been developed which have much higher capacity than those in routine use today.

When I started to write this the

(Continued on page 16)

CLASSIFIED

Interested in buying a sugar cane farm operation. Mike Cremaldi 2431 Main St., Patterson, LA 70392, (504) 395-6980, call after 5:30 p.m.

BUY-SELL-TRADE: Hi-Clearance Tractors: JD 4430 $16,000; JD 4230 $14,500; JD 4020 $6,500; JD 4010 $5,500; JD 3020 $6,250; Int. 706 $4,500; Broussard cane loader mounted on a 560 for $3,500; Int. 1086 $7,250; Int. 1466 $4,500; Land Level $2,500; JD 3-Row Chopper recondition $5,000. Call Grady Dugas, St. Martinsville (Parks), La. (318) 845-4774.

USED EQUIPMENT:

1. Cameco Loader mounted on JD 4230 with cab and chain pilier. Excellent condition $12,000.
2. 4 Chain Net Wagons with Cameco running gear
   16.9 x 30 Tires with reinforced rims
   1 - 14 ton capacity $6,500.
   2 - 12 ton capacity $5,500/each.
   1 - 10 ton capacity $4,500.
   All are hwy. ready with lights and SMV signs
   Unit price available if all taken.
3. Woods 10 ft. Bushhog
   In excellent condition $1,250.
4. Thomson Rotary Ditcher $1,000.

Equipment sold as is with no warranties. All equipment is field ready. Price negotiable.

Contact: Foret Farms, Inc., Raceland, LA.
(504) 537-7161 (Day)
(504) 537-6476 (Night)

WANTED: Operator-Supervisor, Combo man needed for large sugarcane operation. Salary to be based on qualifications and experience. Usual benefits will also apply. Call (504) 473-8625 after 6 p.m.

FOR SALE: 14 Chain Net Cane Carts.
Alton Landry (504) 545-8429.

FOR SALE: IH 1066 Hi-Crop Tractor, IH 856 Hi-Crop Tractor, 2 — IH 856 Tractors with Broussard Cane Loaders, JD 4430 Row Crop - Quadrange, JD 2030 - 65 HP Tractor, JD 574 - 62 HP Tractor, IH 244 - 22 HP Diesel Tractor, JD 16 ft. 1630 Disc. and JD 16 ft. 1640 Disc. Other Equipment Also 1-318-276-3453.

WANTED: One set of 23.1 x 26 tire and wheel for a Cameco Single Row Harvester. Call H & W Simoneaux at (504) 473-7811.

FARM NOTES *(Continued from page 8)*

that our industry has perhaps survived even the worst of catastrophes. This industry was able to replant almost all of the damaged acres during the fall of 1990, thanks to the excellent weather conditions. Given normal growing conditions for the 1991 crop year, and given the fact that this industry has a very large percentage of its crop in plant cane, yields could be very good for perhaps the next two years. However, when this large acreage becomes second stubble during 1993 and fallow in 1994, this industry could face problems. Some growers plan on plowing out some cane early and hopefully growing conditions will be favorable such that some acreage can be kept for third stubble in an attempt to even out the crop percentages. It will take even longer to straighten out the varietal percentages. For these reasons, League Agronomists have indicated to government and other officials that it may be eight to twelve years (two to three cycles of cane) before the industry has fully recovered from the effects of the 1989 freeze.

SEED CANE QUESTIONNAIRES

It is important that growers report their seed cane acreage used during 1990 to their ASCS office as soon as possible. The only way you as a grower can keep track of your progress is to keep good records. Before you forget or possibly misplace the seed cane records that you made during 1990, see your parish ASCS director and give him your records. Besides being important to your own production records, it is extremely important that this industry and each individual parish keep track of its production. With some of the record keeping requirements in current farm legislation it is important that each grower report his acreage as accurately as possible. Don't wait until it is too late, do it as soon as possible!

RAINY SEASON

One would think that we have entered a rainy or monsoon season with the unusual amount of rain received during the last two months. In fact, the past 12 months have been very unusual in the distribution of rainfall. Using rainfall totals at the League Office in Thibodaux, the first three months of 1990 saw rainfall at nearly 150% of normal. The next seven months had rainfall totals which were each below normal with a seven month total (April through October) of only 58% of normal. The final two months of 1990 once again produced excessive rainfall at 152% of normal. The first 15 days of January 1991 finds excessive rainfall continuing since we have already measured 187% of the month's normal total. Although the year 1990 will be recorded as having nearly normal rainfall (94% of normal), the distribution of this rainfall throughout the year indicates that there were periods of excessive rain and an extended period of near drought conditions. None of these helped the growing conditions, but the dry and warm conditions of the fall months did allow the industry to plant considerably more cane acreage than it normally plants.

The rainy period that the industry is now experiencing is not good for cane since cool wet weather only aids the deterioration of cane eyes in the ground. Up to this point the industry has not experienced extremely cold weather and it is thought that there are still plenty of good eyes at this time.

It is extremely important that

(Continued on page 14)

 (Continued from page 13)

growers do all they can to drain fields of excess water. Research has shown that standing water during the cold winter months can substantially hurt cane stands and thus reduce cane yields. During the last few weeks of the harvest season many growers made ruts in some of their fields. Water standing in the fields can hurt the survival of this cane. It is important that growers get this water out now.

MR. FARMER

We at Cane Tractor Parts realize that 1990 was not one of our better years. Remember us when you need to Save Money on parts We also sell good used Tractors & implement if you are in need of a good Tractor or any Equipment

Call us at

1-800-738-2263

CANE TRACTOR PARTS

Route 1, Box 319-T
Jeanerette, LA 70544
(318) 276-3453

Liquid Fertilizers For Sugar Cane

OUACHITA FERTILIZER

NEW IBERIA, LA. (318) 367-8233

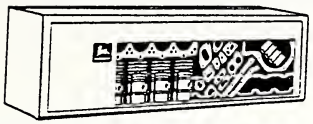
THANKS TO OUR COOPERATORS

Now that the harvest season is over, it is a good time for growers, processors and researchers to review the past year, evaluate what was accomplished and set new goals for 1991. Since this was such an unusual year, most growers and processors say they would rather just forget the year and move on to 1991. However, the things that were done in an attempt to overcome the catastrophic freeze of December 1989 should be recorded for history's sake. Hopefully it will never have to be used again, but should the need arise, recordings of the practices which each of you followed during 1990 would be helpful.

As researchers look back at 1990 many will find that the number of experiments conducted were cut back just as the industry lost much of its cane. For some field research, variation within a field will make the results of some experiments of little value. However, many experiments were still conducted and we should recognize all of the work that those who perform research for this industry accomplished for the benefit of this industry. We must also acknowledge the cooperation of those growers and processors who provide the land, labor, equipment, cane and assistance to perform much of this work. Without this valuable assistance much of the research work would not be accomplished and much of the work that is done would be very costly. We extend our appreciation and a sincere "Thank You" to all who assist the researchers in their efforts to provide data for this industry.

Where Every Part Delivers It All

Winter Overhaul Discounts



12 MONTHS
OR 1500 HOURS,
WHICHEVER OCCURS FIRST

ENGINE OVERHAUL AND
PISTON-LINER KITS
(JOHN DEERE MANUFACTURED ENGINES)

4020 TRACTOR (SN — 200999)	$ 884.00
4020 TRACTOR (sn 201000 —)	$ 832.00
4230 TRACTOR	$ 928.00
4430 TRACTOR	$ 875.00
4640 TRACTOR	$ 963.00
4840 TRACTOR	$ 963.00

JOHN DEERE

LABOR

INSTALLATION LABOR WILL BE COVERED IF DEFECTIVE PART AND ITS REPLACEMENT ARE INSTALLED BY AN AUTHORIZED JOHN DEERE DEALER.

SUNSHINE EQUIPMENT CO., INC.

Hwy. 70 East
Donaldsonville, LA 70346
504-473-9861

100 Circle Dr.
Laplace, LA 70068
504-651-2598

1524 Ridgefield Rd.
Thibodaux, LA 70301
504-446-5081

ATTENTION

ALLEE, ALLEE & ALLEN

Announces Its

Precision Grading Service
Lazerplane Equipped

- ★ Better drainage
- ★ Better weed control
- ★ Increase acreage

Also Agent for
Spectro Physics
Laser Plane Sale

St. James, Louisiana 70086

(504) 265-3965

SUGAR
BULLETIN
WANT ADS
GET
RESULTS

THE SUGAR BULLETIN
206 E., BAYOU RD.
THIBODAUX, LA 70301

(504) 448-3707

 (Continued from page 11)

subject I had in mind was the various types of non-centrifugal sugar produced in the world, but I was detoured by looking up some of the history of centrifugal development. Various types of non-centrifugal sugar are produced and the major source of such production is, of course, cane. I can find no reference to production of such material for human consumption from beets, presumably due to its undesirable flavor. In the western hemisphere such sugar is usually known as panella, and in India as gur or jaggery, and as a bewildering list of names in many countries. As much as ten million tons of such sugars are produced worldwide and there is some interest in their production in the United States for some of the ethnic markets.

The production schemes are all similar and mainly differ in some additives that may be included, such as fragrant flower petals, and the size and type of container used for solidification of the sugar. Hand cut cane is squeezed in a small mill, perhaps animal driven, and the juice evaporated with skimming (as for Louisiana syrup production) until the concentration is high enough for it to solidify. Some lime or sodium carbonate (washing soda) may be added to prevent inversion and improve clarification, and also some naturally occurring vegetable flocculants. The hot (240°F) material is poured into molds, perhaps after seeding or beating to induce crystallization. Various containers are used, including coconut shells, bamboo baskets or it may be cast into large slabs which are cut up into bricks. The polarization values measured for such sugars are in the range 70 to 80.

Muscovado sugar, produced in the Philippines, is cast into five gallon cans and when solidified after several days, holes are made in the bottom of the can to allow the molasses around the crystals to drain out. It is usually sold in this molded form. In Japan there is considerable comsumption of such sugars, some of which may be reprocessed by simple recrystallization.

Cane is not the only source of such sugars and several hundred thousand tons of palm sugar are produced worldwide each year, mainly in India, Burma and Indonesia. The juice is recovered from the palm by tapping, in a similar manner to that used for maple syrup. The brix of the juice is lower than with cane but the concentration and solidification processes are the same as for gur manufacture. The annual yield of gur per tree tapped varies from 20 to 100 lb. and the sugar content of the product from 55 to 75%.

Although we cannot grow the palms for such sugar, we do have plenty of cane and there may be some small market for some non-centrifugal sugars. Gur is currently imported into the United States from India.

Ken Squires
Pilot

PENN-TEX
Helicopters, Inc.
"Precision Chemical Control"
318-278-2174 318-728-4272

THE SUGAR BULLETIN
(504) 448-3707

WASHINGTON UPDATE

(Continued from page 6)

administrative policy affecting sugar. Wallace and Edwards Chairman Don Wallace said, "Rebecca's knowledge and ability is highly regarded, not only by us but by all of her peers. There has never been a job too large or too small for Rebecca. I respect her judgment, heed her advice and counsel, and value her friendship. Although she will be sorely missed, this is a great opportunity for both Rebecca and Mark, and we all wish them well as they begin new careers in California."

CROP PRODUCTION REPORT

Production of raw sugar from the 1990 sugarcane and sugarbeet crops is estimated at 6.81 million tons raw value, up 3 percent from the 1989 crop total. The increase in total sugar output reflects the larger sugarbeet crop, but was limited by the smaller sugarcane production. Please note that the new production number for 1990-91 is 293,000 tons above the published USDA forecast in November when the import quota was increased by 413,000 tons. Production figures by state are as follows:

(Tables continued on page 18)

Tell Them
You Saw It In
THE
SUGAR BULLETIN

MODEL 1162-H FORD COUNTRY

HIGH CLEARANCE
6 CYLINDER DIESEL ENGINE
127 HORSE POWER
11.00 X 16 FRONT TIRES
20.8 X 16 R.I. REAR TIRES
9600 LB LIFT CAPACITY
DELUXE SEAT • ROLL BAR
35[M] CROP CLEARANCE
GEAR TYPE DROP HOUSINGS

PRICED TO SELL
OUT OF TOWN CALL TOLL FREE

1-800-969-0068

M & L INDUSTRIES INC.

1210 ST. CHARLES ST.
HOUMA, LA 70360
PHONE (504) 876-2280

WASHINGTON UPDATE

(Continued from page 17)

SUGARBEETS 1/

STATE	AREA PLANTED			AREA HARVESTED		
	1988	1989	1990	1988	1989	1990
			1,000 ACRES			
CA	215.0	176.0	173.0	212.0	169.0	168.0
CO	39.1	40.6	40.8	38.5	40.0	40.0
ID	168.0	179.0	188.0	166.0	177.0	186.0
MI	152.0	154.0	160.0	145.0	150.0	157.0
MN	339.0	342.0	368.0	334.0	341.0	364.0
MT	49.6	52.7	55.2	48.9	51.9	55.1
NE	63.9	70.1	75.1	62.2	62.2	71.0
NM	0.7	2/	2/	0.7	2/	2/
ND	177.8	180.2	193.9	175.5	180.1	193.2
OH	17.3	13.6	20.0	14.7	11.9	19.2
OR	14.3	15.9	17.2	14.1	15.2	17.0
TX	34.0	36.6	41.9	33.0	35.3	41.0
WY	56.5	61.8	65.0	56.0	59.3	63.8
OTH 3/		1.9	2.3		1.6	2.2
US	1,327.2	1,324.4	1,400.4	1,300.7	1,294.5	1,377.5

	YIELD			PRODUCTION		
	1988	1989	1990	1988	1989	1990
		TONS			1,000 TONS	
CA	25.0	27.3	26.5	5,300	4,614	4,452
CO	22.8	22.8	23.6	880	912	944
ID	24.6	22.8	25.7	4,084	4,038	4,780
MI	16.5	17.1	20.8	2,393	2,565	3,266
MN	14.2	16.0	14.8	4,743	5,456	5,387
MT	21.1	19.9	22.5	1,032	1,033	1,240
NE	21.2	18.8	21.0	1,319	1,169	1,491
NM	12.9	2/	2/	9	2/	2/
ND	14.7	15.7	14.4	2,580	2,828	2,782
OH	15.9	16.7	18.5	234	199	355
OR	26.7	25.7	30.0	376	391	510
TX	21.9	21.0	24.7	723	743	1,013
WY	20.3	19.2	20.5	1,137	1,139	1,308
OTH 3/		27.5	29.5		44	65
US	19.1	19.4	20.0	24,810	25,131	27,593

1/ RELATES TO YEAR OF INTENDED HARVEST EXCEPT FOR OVERWINTERED SPRING PLANTED BEETS IN CA.

2/ INCLUDED IN OTHER TO AVOID DISCLOSURE OF INDIVIDUAL OPERATIONS.

3/ INCLUDES NM AND WA.

ANNUAL CROP SUMMARY
JANUARY 1991 A-70

AGRICULTURAL STATISTICS BOARD,
NASS, USDA

WASHINGTON UPDATE

(Continued from page 18)

SUGARCANE

STATE	AREA HARVESTED			YIELD 1/		
	1988	1989	1990	1988	1989	1990
	1,000 ACRES			TONS		
			FOR SUGAR			
FL	404.0	405.0	420.0	31.6	31.4	33.5
HI	78.9	74.7	69.5	96.4	94.8	93.6
LA	279.0	290.0	201.0	25.3	25.7	20.0
TX	31.7	33.6	34.4	33.3	24.7	26.4
US	793.6	803.3	724.9	35.9	34.9	35.2
			FOR SEED			
FL	17.0	15.0	14.0	31.6	31.4	33.5
HI	7.2	6.7	6.5	27.5	29.1	30.4
LA	26.0	25.0	44.0	25.3	25.7	20.0
TX	1.5	1.9	1.8	20.7	25.3	22.2
US	51.7	48.6	66.3	27.6	27.9	23.9
			FOR SUGAR & SEED			
FL	421.0	420.0	434.0	31.6	31.4	33.5
HI	86.1	81.4	76.0	90.6	89.4	88.2
LA	305.0	315.0	245.0	25.3	25.7	20.0
TX	33.2	35.5	36.2	32.8	24.7	26.2
US	845.3	851.9	791.2	35.4	34.5	34.2

	PRODUCTION 1/		
	1988	1989	1990
	1,000 TONS		
	FOR SUGAR		
FL	12,766	12,717	14,070
HI	7,606	7,082	6,505
LA	7,050	7,440	4,020
TX	1,057	830	908
US	28,479	28,469	25,503
	FOR SEED		
FL	538	471	469
HI	198	195	198
LA	658	643	880
TX	31	48	40
US	1,425	1,357	1,587
	FOR SUGAR & SEED		
FL	13,304	13,188	14,539
HI	7,804	7,277	6,703
LA	7,708	8,083	4,900
TX	1,088	878	948
US	29.904	29,426	27,090

1/ NET TONS

ANNUAL CROP SUMMARY
JANUARY 1991

A-71

AGRICULTURAL STATISTICS BOARD,
NASS, USDA

WASHINGTON UPDATE

(Continued from page 19)

SUGAR AND MOLASSES PRODUCTION

SOURCE AND STATE	SUGAR						MOLASSES 1/		
	RAW VALUE			REFINED BASIS					
	1988	1989	1990 2/	1988	1989	1990 2/	1988	1989	1990 2/
	1,000 TONS						1,000 GALLONS		
	SUGARCANE								
FL	1,566	1,399	1,662	1,464	1,307	1,553	92,246	100,042	95,000
LA	797	844	430	745	789	402	43,475	42,930	26,800
TX	107	69	90	100	64	84	9,992	11,799	4,954
	MAINLAND								
TOTAL	2,470	2,312	2,182	2,309	2,160	2,039	145,713	154,771	126,754
HI	928	864	822	867	807	768	3/47,420	3/39,960	3/37,810
US	3,398	3,176	3,004	3,176	2,967	2,807	193,133	194,731	164,564
	SUGARBEETS								
US	3,507	3,442	3,809	3,278	3,217	3,560			
	CANE & BEETS								
US	6,905	6,618	6,813	6,454	6,184	6,367			

1/ BLACKSTRAP (80 DEGREE BRIX) INCLUDES HIGH-TEST MOLASSES FROM FROZEN CANE AND EDIBLE MOLASSES. LA EDIBLE MOLASSES TOTALED 1,925 THOUSAND GALLONS IN 1989. 1990 WILL BE AVAILABLE IN JUNE.

2/ PRELIMINARY.

3/ 85 DEGREE BRIX.

ANNUAL CROP SUMMARY
JANUARY 1991

A-72

AGRICULTURAL STATISTICS BOARD
NASS, USDA

Get a jump on tomorrow save today

Take stock in America.

With higher paying U.S. Savings Bonds

e Sugar Bulletin
6 E. Bayou Rd.
bodaux, La. 70301

BULK RATE
U.S. POSTAGE
PAID
PERMIT NO. 43
Thibodaux, La.

SERIALS DEPT.
LOUISIANA STATE UNIV.
LIBRARY
BATON ROUGE LA 70803

The Sugar Bulletin

OFFICIAL BULLETIN OF THE AMERICAN SUGAR CANE LEAGUE OF THE U.S.A.

In This Issue

Up Front With The League by P. J. deGravelles, Jr. 4
Washington Update With Don Wallace 6
Farm Notes by Dr. Charley Richard 8
The Baton Rouge Line by Tom and Linda Spradley 10
In The Factory by Stephen J. Clarke 11
Fertilizer and Soil Fertility Practices for Sugarcane in Louisiana, 1991 15

We stand for the encouragement of Home Industries as against Foreign Competition

Vol. 69 — No. 6 MARCH 1, 1991

The Sugar Bulletin

The Official Organ of the American Sugar Cane League of the U.S.A., Inc.

P. J. deGravelles, Jr., Editor and General Manager
Charles A. Richard, Ph.D., Director of Research and Field Representative
Windell R. Jackson, Senior Agronomist
Herman Waguespack, Jr., Agronomist
John Constant, Business Manager
Nannette B. Nickens, Office Secretary
Paul G. Borron, III, Legal Counsel

Washington Representative:
Wallace and Edwards, Inc.
1150 Connecticut Avenue, N.W.
Suite 507
Washington, D.C. 20036
Phone: (202) 331-4331

Baton Rouge Representative:
Spradley and Spradley
6216 Riverbend Boulevard
Baton Rouge, LA 70820
Phone: (504) 766-1359

Editorial and Executive Office:
206 E. Bayou Rd., Thibodaux, LA. 70301
Phone: (504) 448-3707

OFFICERS AND MEMBERS OF THE BOARD OF DIRECTORS OF THE AMERICAN SUGAR CANE LEAGUE

William S. Patout, III, Jeanerette, LA
President
Dr. Daniel Viator, Youngsville, LA
1st Vice-President
P. J. "Pete" deGravelles, Franklin, LA
Vice President — General Manager
Don Wallace, Washington, DC
Vice President — Government Relations
Patrick Cancienne, Belle Rose, LA
Treasurer
Irving Legendre, Jr., Thibodaux, LA
Secretary

Pat Accardo, Franklin, LA
Bryan Allain, Jeanerette, LA
J. G. Beaud, Jr., New Roads, LA
Bert Beyt, Jeanerette, LA
Ramon E. Billeaud, New Orleans, LA
Felix Blanchard, New Iberia, LA
Ronald Blanchard, Napoleonville, LA
Neal Bolton, St. James, LA
Joseph E. Boudreaux, Thibodaux, LA
Fred Y. Clark, Franklin, LA
Lawrence Dugas, New Iberia, LA
Dan Duplantis, Raceland, LA
Paul Ellender, Bourg, LA
John F. Gay, Plaquemine, LA
Ronald Gonsoulin, New Iberia, LA
Mike Graugnard, Edgard, LA
Warren Harang, III, Donaldsonville, LA
Roddy Hulett, St. Martinville, LA
Bobby Judice, Franklin, LA
Kenneth Kahao, Port Allen, LA
Denis Lanaux, Killona, LA
Melvin Landry, New Iberia, LA
D. C. Mattingly, Paincourtville, LA
Jerry McKee, Thibodaux, LA
Kenneth Peltier, Thibodaux, LA
R. L. Roane, Jr., Jeanerette, LA
Howard Robichaux, Labadieville, LA
Raphael Rodriguez, Franklin, LA
Mel Schudmak, White Castle, LA
Frank Sotile, Donaldsonville, LA
David Stewart, Lakeland, LA
Roland Talbot, Thibodaux, LA
Jackie Theriot, Breaux Bridge, LA
James Thibaut, Donaldsonville, LA
Glenn Timmons, Brusly, LA
Eugene Woods, Paincourtville, LA

HONORARY MEMBERS

Joseph G. Beaud, Sr., New Roads, LA
Charles Billeaud, Broussard, LA
Paul G. Borron, Jr., Plaquemine, LA
Jerry L. Dickson, New Orleans, LA
Gilbert J. Durbin, New Orleans, LA
F. Evans Farwell, New Orleans, LA
J. N. Foret, Jr., Thibodaux, La.
Andrew Gay, Plaquemine, LA
F. A. Graugnard, St. James, LA
Warren J. Harang, Jr., Thibodaux, LA
Lloyd Lauden, New Orleans, LA
E. W. McNeil, Brusly, LA
J. Randolph Roane, Jeanerette, LA
Charles C. Savoie, Belle Rose, LA
Edward T. Supple, Bayou Goula, LA
E. Berkshire Terrill, Brusly, LA
John Thibaut, Napoleonville, LA
M. V. Yarbrough, Fort Smith, Ark.

MAXXUM™

"The New Drain Cleaning Machine"

One of the most durable parts on a MAXXUM tractor is made of paper.

Everything on the new Case International MAXXUM tractors is designed to last, including the 5-year, 5,000-hour warranty on the *entire* tractor.* That's the best warranty in the business, by far.

It just goes to show how much Case International believes in the durability and reliability of MAXXUM tractors.

What makes the MAXXUM tractor so durable? It comes equipped with one of three proven Case International diesel engines. They're durable, dependable and guaranteed to deliver both high torque rise and high fuel economy. You can feel confident knowing that more than 250,000 similar engines are in use around the world. Count on them to perform — trouble-free — for thousands and thousands of hours.

Come in to see the Case International line of MAXXUM tractors today.

* Excluding tires, which are covered by their own manufacturer's warranties. A $200 deductible applies to each repair after the first year.

©JI Case Company 1989

Switzer Sales and Service
Jeanerette, LA
(318) 276-6384

Gremillion's, Inc.
New Roads, LA
(504) 638-6347

Lanier Int'l. Inc.
Abbeville, LA
(318) 893-1988

Lemann's Farm Supply Inc.
Thibodaux, LA
(504) 447-3776

Baton Rouge, LA
(504) 357-6453

Donaldsonville, LA
(504)473-7927

caseih

UP FRONT WITH THE LEAGUE

By P. J. deGravelles, Jr.

In 1953, the sugar industry was facing some of the same problems it is encountering today, evidenced in the following article regarding so called "Free Trade". The old saying — "What goes around comes around" is certainly true. The free traders are still around.

LEAGUE PRESENTS ITS CASE AGAINST FREE TRADE

(To the Chamber of Commerce of the New Orleans Area on December 18, 1952.)

The American Sugar Cane League which represents the Louisiana sugar cane growers and processors who grow and process 95 per cent of the State's cane crop is pleased to have the opportunity to present its views regarding "free trade."

We understand "free trade" to mean an unrestricted and unregulated flow of goods among nations. It implies the elimination of all export and import duties, subsidies, taxes, quotas, and all other barriers.

The ultimate result of free trade would be the production of each commodity and article in the area with the best comparative advantage. Considerations such as national security and the desire of a nation to maintain a higher standard of living than other nations would play no part in determining where a commodity or article would be produced.

Under a system of free trade if a nation wished to exploit its labor and resources and reduce the general standard of living in the country in order to improve its comparative advantage in producing a commodity or article, it would be at liberty to do so and would thereby eliminate competition from other nations or force other nations to also exploit their labor and resources and reduce their standards of living. It would be disastrous for the United States to adopt a policy of free trade which could only result in a reduction in our standard of living and the exploitation of our labor and resources.

From the standpoint of national security the United States must necessarily produce many items which might be produced cheaper elsewhere. Foreign sources of supply can be abruptly cut off in national emergencies. From the standpoint of economic strength and the maintenance of full employment, we must have diversity of production. We cannot have a sound economy if we produce just a few things for which we happen to have natural advantages.

A system of "free trade" carried to its extreme might mean that we would buy all of our surgical instruments and watches from Germany and Switzerland. The current tariffs help maintain domestic industries which produce part of our needs of these items. These and other similar industries must be maintained for in times of national emergency we must look to them for the

(Continued on page 5)

production of technical precision instruments which today are indispensable to our national security. Practically all of our toys might come from Japan and Czechoslovakia. The present tariffs allow what some persons consider an alarming amount of these foreign toys to come into this country. All of our sewing machines might be manufactured in Japan. Germany might supply all of our cameras. Russia might supply all of our furs and put the Louisiana fur industry out of business. Asia, with its cheap labor, could supply all of our rice. Argentina can produce cattle, corn, and wheat cheaper than our farmers can. Our cotton textile industries could very easily be supplanted by textiles from Japan and India. Venezuela and the Middle East could supply a large part of our petroleum and petroleum products. Much of our fish and fish food needs could be supplied by the Philippines, Japan, and other countries in that area. Uncontrolled imports of copra from China, the Philippines, and tropical South American could largely displace our soy bean and cotton seed oil industries. New Zealand could supply us butter cheaper than we can produce it ourselves. We could buy cheese from Denmark, Sweden, and Holland at prices below our own cost of production. When the canning of whole milk is perfected, New Zealand, Australia, and Argentina could wipe out the entire dairy industry in this country with the exports of milk to us. Shoe manufacturers would have to give up in face of competition from shoes imported from Czechoslovakia and other Central European countries. Our aluminum could be manufactured in countries with sources of the raw material rather than being manufactured here with imported raw material. Our ship building industries could not compete with the ship building industries in the Scandinavian countries. Our shipping industry could not exist without the protection and subsidies it receives. Australia could supply all of our wool needs.

The foregoing are only a few examples of what would likely happen under a system of "free trade." A publication of the United States Tariff Commission entitled "United States Import Duties (1952)" contains 236 pages of articles having import duties. A review of these duties convinces us that a system of "free trade" would completely disrupt the economy of this nation. Widespread unemployment, lower wage rates, lower profits, and the complete extinction of many industries would inevitably result from a policy of "free trade."

As an example of what would happen under free trade to a specific commodity which we have produced in this country for more than a century, we cite the case of sugar. Foreign sugar producing areas have advantages in lower wage rates, cheaper land, and lower taxes; therefore free trade would mean the complete destruction of the sugar industry in the continental United States, including the sugar cane and sugar beet industries. The cost of producing a hundred pounds of raw sugar in Cuba is about $2.00 less than in Louisiana. Only 50 cents of the approximate $2.00 difference in cost of production is offset by a tariff on Cuban sugar sold in the United States. This leaves Cuba a substantial profit on sugar sold in this country. As previously indicated the institution of a policy of "free trade" would mark the end not only of all tariffs but

(Continued on page 16)

WASHINGTON UPDATE WITH DON WALLACE

BUSH NOMINATES REP. MADIGAN TO REPLACE YEUTTER AS USDA SECRETARY

President Bush has nominated Rep. Edward Madigan (R-Ill) to replace Clayton Yeutter as Agriculture Secretary. Madigan is an 18-year veteran of the House, representing the agricultural 15th district of Illinois. He is currently the ranking minority member of the House Agriculture Committee and has served 16 years on the committee. Madigan has been interested in farm export markets and as a co-sponsor of the 1990 farm bill was instrumental in rewriting the bill to expand export markets for farmers. He is also a member of the Energy and Commerce Committee and served a term in the 97th Congress on the Republican Planning and Research Committee.

At a press conference Madigan said he wants to make sure that the interests of farmers are heard in Washington. He also said that his goal was to carry out Bush's desire that rural Americans have a strong voice in the councils of the government.

GATT TALKS LIKELY TO RESUME WEEK OF FEBRUARY 18

Arthur Dunkel, GATT's director General, is expected to convene three informal meetings with groups of negotiators the week of February 18 in another effort to restart the stalled Uruguay Round talks. A Western diplomat said it is thought that the initial meeting would deal with agriculture to be followed by meetings dealing with services and market access. Also, a senior European official says that Dunkel is sure "he has the necessary confidence from the key players to re-engage the talks." The official went on to say that Dunkel "will still proceed for a few days more with his telephone diplomacy with ministers, and with his private bilateral consultations, to be on the safe side." The next test will be whether Washington and Brussels find the language in Dunkel's so-called "statement of ideas". Dunkel has been talking to officials in both capitals hoping that both sides will agree to the language.

In another turn of events, farm reforms have been dealt a setback by the European Community's refusal to give commitments on agriculture changes pressed for by the U.S. over the past 10 days. There have been strains in the relationship of Frans Andreissen, the EC Trade Commissioner and U.S. Trade Representative Carla Hills. In several transatlantic telephone conversations, the two failed to agree on how to restart the negotiations on agriculture. With time running out, it has been assumed that no agreement could be reached by March 1. If no agreement is reached by March 1, President Bush will have to seek an extension of his "Fast Track" negotiating authority. The "Fast Track" allows a treaty to be submitted to Congress by the Administration and among other things, only allows an up or down vote on the agreement — no amendments can be offered. If President Bush asks for an extension of "Fast Track" authority, the Congress would have until May 31 to pass a resolution of disapproval. Such a resolution would have to be reported by the Senate Finance Committee or House Ways and Means and would require a majority vote of either body to deny "Fast Track" extension. Many members are saying that

(Continued on page 7)

WASHINGTON UPDATE

(Continued from page 6)

Carla Hills has to show Congress "real progress" is being made on an agreement acceptable to the U.S. before they will be willing to allow a "Fast Track" extension. To a large extent this promise is pinned to reform of the European Community common agriculture policy.

HOUSE AGRICULTURE SUBCOMMITTEE ASSIGNMENTS FINALIZED

Listed below are the members of the Cotton, Rice, and Sugar subcommittee of the House Agriculture Committee for the 102nd Congress. New members of the subcommittee are italicized. Democrats are: Jerry Huckaby, Chrm. (LA); Mike Espy (MS); *Collin C. Peterson* (MN); Walter B. Jones (NC); Gary Condit (CA); Charles Hatcher (GA); Robin Tallon (SC); Richard H. Stallings (ID); *Calvin M. Dooley* (CA); *Charles Rose* (NC); Charles W. Stenholm (TX). Republicans are: Bill Emerson (MO); Tom Lewis (FL); Larry Combest (TX); Wally Herger (CA); *Dave Camp* (MI); *Jim Nussle* (IA) and John A. Boehner (OH).

Ken Squires
Pilot

PENN-TEX
Helicopters, Inc.
"Precision Chemical Control"
318-278-2174 318-728-4272

GOODYEAR

GOODYEAR TIRES FOR YOUR CAR, TRUCK, FARM OR OFF HWY. EQUIPMENT

NOBODY FITS YOU LIKE GOODYEAR

- 24 HR. ROAD SERVICE
- COMPLETE AUTOMOTIVE CERTIFIED SERVICE
- TRUCK TIRE BALANCE AND ALIGNMENT

SPECIAL
SURE-GRIP TD-8

SUPER TRACTION • SUPER STRENGTH

GENERAL ELECTRIC AUTHORIZED DEALER

7:30 AM - 6:00 PM MON. - FRI.
7:30 AM - 1:00 PM SAT
1203 ST. PATRICK HWY
THIBODAUX

PIT STOP
YOUR ON FARM SERVICE SPECIALIST

GOODYEAR AUTO SERVICE CENTER
1-800-256-1269 (504) 447-2696

FARM NOTES By Dr. Charley Richard

EXCESSIVE FALL GROWTH — HIGH PERCENTAGE OF PLANT CANE LONG RANGE PLANNING COMMITTEE

As of this writing, February 19, 1991, there are a large number of acres in the cane belt that have a heavy cover of fall growth of cane. Most of these acres are either first stubble cut as seed cane during 1990 or plant cane that was planted early and mid-season during the fall. A small percentage of these acres still have live terminal buds of growth and may contain several joints and live lateral eyes.

The question now arises as to whether this excessive growth should be removed. There are differences of opinion among scientists and even among growers; but many including this author feel that if weed control is a problem (itchgrass or heavy johnsongrass pressure) then it is best to false shave or bush hog this excessive growth off the top of the tow. By starting with a trash free row surface, pre-emergence herbicides can perform better. This situation of heavy weed pressure really doesn't allow many options. A more difficult decision is in fields where the grass pressure is not severe. In these fields there may be some temptation to keep the heavy growth into the spring (should no additional cold weather occur). If any amount of terminal buds have already been killed then keeping this excessive growth may be a poor choice since lateral eyes are generally still alive and could germinate. This author's opinion is that fields with a significant percentage of dead terminal buds should have the excessive growth removed.

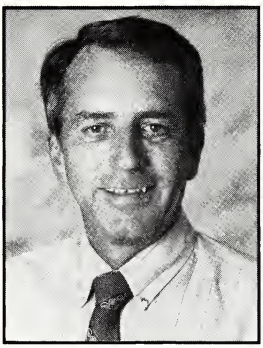
The most difficult decision is in those fields where there is little grass pressure and very little or no terminal bud injury has occurred. These fields are very tempting to keep and among those fields which League Agronomists have examined, it is a field by field decision. Growers should always remember that there is still ample time for an injurious frost or freeze to occur and that in all cases weed control can be improved by removing the excessive top growth. It is not suggested that growers shave plant cane unless it was covered too deep. Instead, removal of excessive fall growth should be done by false shaving or bush hogging.

HIGH PERCENTAGE OF PLANT CANE

It is expected that there will be over half of the 1991 crop in plant cane, based upon information from Mr. Dalton Landry of the Louisiana Cooperative Extension Service. Of course, growers are hoping for high yields from this acreage but they should also consider some of the problems that may be encountered with such a high percentage of plant cane. Since the plant cane is normally what gets growing first in the spring, it may be that fertilization, cultivation, and especially lay-by may have to be started earlier than normal in order that all of the acreage can get treated. It would be foolish to get caught without having done your best job to the acreage you are counting on to give good yields and recoup some of the losses from the 1989 freeze. Growers should also be planning on how to get back to the proper rotation of plant cane and stubble crops and also the proper percentage of varieties. This will take some extra planning, but will pay off in future years if you can get seed sources of the right varieties close to where you want to plant them. Also

(Continued on page 18)

Farm Financing From Folks Who Understand.



LESTER SIMON
Regional V.P.
(318) 364-0217

HARVEY GONSOULIN
Regional V.P.
(504) 446-9450

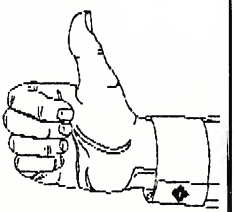
Sometimes it's hard to explain — to someone who doesn't know your business — why you need money and how you plan to use it.

At First South Production Credit Association you won't have to educate our loan officers.

They understand farming and they'll tailor a financing package to fit your needs.

We'll help you buy that new tractor, get the crop in this year, make farm improvements or just keep the cash flow flowing.

BECAUSE YOU DESERVE IT.



SM

First South Production Credit Association

The Baton Rouge Line

By Tom and Linda Spradley

As we move closer to the Legislative Session, some matters are beginning to take shape.

It now appears that there will be two special sessions immediately prior to the regular session, scheduled to convene on April 15. One special session will deal with taxes since the state Constitution prohibits tax increases in regular sessions in odd-numbered years. The other will deal with reapportionment.

The special session on taxes is basically being called to renew the three cent sales tax on food, utilities and some prescription drugs. This tax has been in effect in some form every year since 1986 to help balance the budget. There is a feeling among some legislators that this tax is not needed especially in an election year — but Gov. Roemer has said that if the full three cents are not renewed, deep cuts will be required in the budget. That might not sit well with legislators that are looking to "bring something home" during this election year.

Contributing to the belief that the sales tax need not be renewed is the war in the Persian Gulf and the increase in oil. Unfortunately, oil was Louisiana's savior for so long that many people believe it can still come to the rescue of our financial problems. Not true. Too little, too late is the best way to describe the oil situation. We are too much in the hole, and there's not enough oil left, at any price, to make up the deficit.

Roemer has stated that if the full three cent sales tax is not renewed, and there are no accumulated surpluses to plug into the budget, the state will be about $911 million short of the amount needed to maintain services and meet cost increases.

The other special session, which will deal with reapportionment, is likely to be a lively one since there are several legislators whose districts will be changed significantly or, in some cases, eliminated altogether. While there have been, and will continue to be, hearings on this matter — public hearings around the state are tentatively scheduled for March 4, 5, 6, and possibly 7 — the emotion and politics of a legislative district being changed so that it jeopardizes reelection is likely to be carried to the final minute of the process.

The environment continues to be a headline maker and issues to protect the environmental probably will be a major focus of the regular session. The abortion issue is likely to once again garner headlines but many feel it will not be the all encompassing and emotionally draining issue that it was last session. As is traditional in an election year, it is expected that there will be fewer controversial bills than in other legislative sessions, and fewer bills filed.

The Sugar Bulletin

201 E. Bayou Road
Thibodaux, LA 70301

Phone:

(504) 448-3707

IN THE FACTORY

ISSCT PROCEEDINGS AND "THAT'S OBVIOUS"

Stephen J. Clarke
Audubon Sugar Institute
Louisiana Agricultural Experiment Station

The proceedings of the most recent congress (1989) of the International Society of Sugar Cane Technologists (ISSCT) have just arrived and there are a number of interesting papers and reports included. Many of the major papers deal with the problems of mechanization of cane operations and also with systems for cane payment in varying countries. I am not the best person to comment on all the problems and advantages of different harvesting systems but some of the more useful comments include are that the mills now find that chopped cane is easier to transport, flows better and requires less preparation for extraction of juice (Australia). In some cases there has been at least a 2% unaccounted for loss of sugar due to chopper harvesting. Loading of the cane for transport is perhaps a more serious problem for inclusion of field soil, etc., with the cane. Soil contents of less than 0.2% with manual loading increased to values in the range of 3 to 5% in the initial introduction of mechanical loading. Improvements have reduced this to 0.2 to 2% (Brazil). Anyone interested in getting copies of these papers should contact me.

Any cane payment system has evolved to suit the particular structure of the industry involved, for example, the number and size of individual farmers supplying the mills. In Australia a formula is used to apportion the sugar income between millers and growers. Built into the formula are incentives for both to improve their efficiency. A fixed factory efficiency is used and the relative split of proceeds is in the ratio two thirds to the growers and one third to the millers at a recoverable sugar content of 12%. If the sucrose content of the cane is above this value, the grower reaps the benefit but the mill still gets the same value (4% recoverable sugar on cane) if the cane has less sucrose. The incentive provided to the millers by this formula is that, if the recovery efficiency is increased, this is not shared with the growers.

In Brazil cane is used for production of both sugar and alcohol and the payment system has to take this into account. The system used is often the horizontal core sampler and the juice is extracted with the hydraulic press, as done in Louisiana. However, in their case the fibre content is calculated from the press cake weight using a correlation equation, rather than by drying each cake. The calculated cane composition is compared with a standard cane for payment purposes, taking into account the pol % cane and the juice purity (used to calculate recovery with molasses of 40 purity). In Jamaica, the system being introduced is very similar to that in Louisiana, except that an industry wide liquidation factor is being used to avoid the problems of widely varying factory efficiencies.

In South Africa the cane is sampled and analyzed directly in the cane carrier after preparation. Consignments of cane

(Continued on page 24)

CLASSIFIED

BUY-SELL-TRADE: Hi-Clearance Tractors: JD 4430, 4230, 4020, 4010, 3020; IH 1066, 706; Low-Clearance 1086 w/duals, 1466, 484 Broussard cane loader mounted on a 560; Land Level 36 ft.; 2-JD 3-Row Choppers; 2 JD 1630 disk 16 ft. w/new blades; 6 row Amico hipper; Grader blade 12 ft. w/hydraulics; 3 row Lilliston. Call Grady Dugas, St. Martinville (Parks), La. (318) 845-4774.

BUY-SELL-TRADE: Grader Blade Pull type, Ready to Roll — $2500; 74 - 1466 IH 4WD Front Wheel Assist Tractor — $6500; 72 - 1256 IH $4000; 13 Speed Transmission, Ready — $1,000; 1630 JD Chopper — $2200; Land Level — $2500. Call (318) 367-2152 or (318) 365-8040.

USED EQUIPMENT:

1. Cameco Loader mounted on JD 4230 with cab and chain pilier. Excellent condition $12,000.
2. 4 Chain Net Wagons with Cameco running gear
   16.9 x 30 Tires with reinforced rims
   1 - 14 ton capacity $6,500.
   2 - 12 ton capacity $5,500/each.
   1 - 10 ton capacity $4,500.
   All are hwy. ready with lights and SMV signs
   Unit price available if all taken.
3. Woods 10 ft. Bushhog
   In excellent condition $1,250.
4. Thomson Rotary Ditcher $1,000.

Equipment sold as is with no warranties. All equipment is field ready. Price negotiable.

Contact: Foret Farms, Inc., Raceland, LA.
(504) 537-7161 (Day)
(504) 537-6476 (Night)

WANTED: Operator-Supervisor, Combo man needed for large sugarcane operation. Salary to be based on qualifications and experience. Usual benefits will also apply. Call (504) 473-8625 after 6 p.m.

(Classified continued on page 13)

CLASSIFIED

FOR SALE: Cameco 2-Row Harvester, well maintained JD engine, all latest modifications $85,000. Cameco Self Propelled Field Loader, 3208 Cat, chain powered, $13,500 (504) 627-9641.

WANTED: Good all around man to operate 2-row harvester, maintenance supervisor, welding a plus, on large sugarcane operation, year round, salary & good benefits. Apply at 11675 N. River Rd., Port Allen, LA 70767 or call (504) 627-9641.

FOR SALE:

JD 2630 Tractor — 70 Hp (New Engine)
JD 2030 Tractor — 60 Hp
IH 574 Tractor — 52 Hp
IH 284 Gas Tractor — 22 Hp
IH 244 Diesel — 20 Hp (Turf Tires)
2 — IH 856 Hi Crop Tractor
IH 806 Hi Crop Tractor
IH 1066 Hi Crop Tractor
2 — IH 856 Hi Crop Tractor with Broussard Loader
JD 1650 Diesel Tractor — 55 Hp
2 — Sidewinder Offset Ditchers
IH 1066 Hydrostat with Broussard Loader
Cosmotor "V" Ditcher — PTO Driven
2 — JD 1630 Disc Harrows (16 Ft.)
2 — Chisel Plows — 1 Graham
Other Tractors & Equipment
Call 1-800-738-2263.

WANTED TO BUY:

Rayne Plane Land Leveler
Rayne Plane Water Leveler
JD — 1630, 1635 or 1640 Disc Harrows (16 Ft. Wide)
1 — Grain Drill (18-20 Ft.)
6 or 8 Row Lilliston Rolling Cultivators,
4 or 5 Spyder
1 — 6 or 8 Row Do-All With Scratchers
Hi-Crop Tractors, Any Age, Make or Condition
Call 1-800-738-2263.

Louisiana Sugar Industry Rep. Speaks at Sugar Club

Pete deGravelles, Jr., general manager of the American Sugar Cane League, which represents the Louisiana sugar industry, addressed the Sugar Club at a luncheon in New York on January 16th.

Mr. deGravelles spoke on the past, present and the future of the Louisiana cane sugar industry. On a historical note, sugar cane was first grown in Louisiana in 1751 by the Jesuits, and was not produced commercially until 1795.

A blight nearly eliminated the Louisiana cane industry in the early 1920's. A direct result was the founding of the American Sugar Cane League in 1922 to promote and foster research in disease-resistant cane varieties and improved agricultural practices. The League has worked in cooperation with the USDA and Louisiana State University for many years. Research is the League's number one mission, according to Mr. deGravelles, and the "lifeblood of the sugar industry."

After three consecutive record-breaking years of sugar production culminating in the all time record sugar production of 864,000 strv in 1989, the 1990 cane crop was crippled by over 80 hours of single-digit temperatures in late December, 1989. Despite massive losses in the ratoon cane, "cajun" farmers proved that they are survivors, producing 440,000 tons of sugar this year, an astounding 51% of 1989's production. Sugar producers in Louisiana are looking for a rebound in 1991, with cane acreage returning to pre-freeze levels, an estimated 315,000 acres.

Louisiana sugar producers and the League are currently developing long range plans. Their goal is to do more than just survive the 1990's. Realizing that farm legislation will not last forever, they plan to position their industry to enter the next century in peak technological shape.

Fertilizer and Soil Fertility Practices for Sugarcane in Louisiana, 1991[1]

General fertilizer and soil fertility recommendations are made annually for use when results from soil tests are not available. These recommendations are based on research results obtained by the Louisiana Agricultural Experiment Station. Growers are encouraged to base their fertilization program on soil test results.

Research has shown that additions of micronutrients (iron, manganese, zinc, copper, boron and molybdenum) are not needed for sugarcane production in Louisiana.

A cane grower should consult the county agent before use of soil fertility practices not mentioned in these recommendations.

Sources and Rates of Application

Solid and liquid NPK fertilizer sources are about equal in their effectiveness for production of sugarcane in Louisiana. The per acre cost of purchasing and applying fertilizers should be considered in selecting materials. The source of sulphur should be in the sulfate form such as calcium sulfate.

Yield response to fertilizer is usually higher in stubble cane than plant cane. Stubble cane usually responds to higher nitrogen rates on heavy soils (silty clay loam and clay) than on light soils (sandy loams and silt loams). Response to applied phosphate and sulphur is most likely on the heavy soils, even though soil tests may be high. Response by stubble cane to potash normally occurs more on light than heavy soils.

The use of potash on light soils which test medium low to low in soil potassium can increase the yield of cane and sugar per ton in stubble cane of all varieties, especially on light soils. Beneficial effect of potash on sucrose content or sugar per ton of cane, usually occurs with the use of high N rates during the first half of the harvest season.

Recommended annual rates of nitrogen (N), phosphate (P_2O_5), potash (K_2O) and sulphur (S) are shown in Table 1. Where growers apply nitrogen rates higher than those recommended, potash should also be applied at an increased rate.

Seed Cane

Up to 25% higher than normal rates of fertilizer should be used for seed cane to produce maximum stalk length at planting time.

Time and Methods of Application

Spring Application

Fertilizer should be applied in the spring in a vertical band to a depth of 6 to 12 inches on both sides of the row. Research shows that yields are higher if the fertilizer is applied at recommended rates in April or early May rather than earlier in the spring.

Interest in broadcasting phosphate and potash fertilizers has been on the

(Continued on page 22)

[1] Prepared by Dalton Landry, County Agent and Coordinator of Sugarcane Educational Programs, Dr. Eddie R. Funderburg, Associate Specialist and Jesse B. Holder, Extension Associate, Louisiana Cooperative Extension Service and Dr. Ray Ricaud, Agronomist, Louisiana Agricultural Experiment Station.

also of all quota systems. If it were not for the sugar quota system which divides the U. S. sugar market among all producing areas, Cuba could and undoubtedly would put our mainland sugar industry out of business if the tariff remained at its present, all-time low of only 50 cents a hundred pounds. In 1934 the tariff on Cuban sugar was $2.00 a hundred pounds.

If the mainland sugar industry were destroyed, sugar prices in this country would be subject to the wide fluctuations which have always existed in the world sugar market. In 1950 and 1951 world sugar prices were considerably higher than U. S. sugar prices. At present the world sugar price is considerably below the cost of producing sugar in Cuba. It is of prime importance that this country have a stable supply of sugar at stable prices. In war time we have been cut off from some of our offshore supplies of sugar. This could easily happen again. For that reason common sense dictates that we produce a substantial amount of sugar on the U. S. mainland. Sugar was the first food rationed during World War II and the last food removed from rationing after the War. May we point out at this point that in spite of existing protective measures, sugar today is one of our cheap commodities. It is our cheapest energy food! The market price of raw sugar today is less than the World War II O. P. A. controlled price. We know of no other major commodity with reference to which this is true.

In addition to serving as a protection to consumers, the mainland sugar industry contributes to the economic welfare of our nation by employing a large number of our citizens, by paying local, State, and National taxes, and by spending all of its monetary returns in buying goods and services from other United States citizens.

A system of "free trade" would eliminate the production of 300,000 acres of sugar cane annually in 20 Louisiana parishes. Sugar cane is the major cash crop and the major source of income in 13 parishes. No satisfactory alternative farm enterprise exists for most sugar cane farmers. Free trade would make useless 52 raw sugar mills in Louisiana. There would be no bagasse which is the raw material used by the Celotex Corporation in manufacturing wall board and is a raw material which may be the basis for new industries within several years. Destruction of the Louisiana sugar industry would also destroy or seriously affect many businesses which are dependent in whole or in part on the sugar industry.

This year the Louisiana sugar industry has produced sugar, syrup, molasses, and bagasse valued at more than $60,000,000 at the first processing level. This constitutes new wealth derived primarily from sales of the foregoing Louisiana produced products in a trade area outside the State. Practically all of this money will be spent in Louisiana, and more particularly in the New Orleans trade area, for labor, machinery, fertilizer, and other items needed to produce sugar cane and raw sugar and for family living.

In addition to producing sugar cane and products therefrom Louisiana has eight refineries which not only refine Louisiana raw sugar but refine imported raw sugar. A system of "free trade" would elimiate these refineries as effectively as it would the raw sugar mills. Cuba and other offshore areas would ship us refined sugar rather than the

(Continued on page 17)

UP FRONT WITH THE LEAGUE

(Continued from page 16)

raw product. The Louisiana sugar refineries annually refine and market sugar valued at approximately one-quarter billion dollars.

The Louisiana sugar industry, in all of its segments, contributes to the support of labor, retailers, wholesalers, manufacturers, and others located in the New Orleans trade area. We submit the contribution is substantial. The elimination of the Louisiana sugar cane farmers, and the raw and refined sugar industries as well as other similar situated industries by the adoption of a policy of free trade would be inconsistent with the policy of the City of New Orleans and the State of Louisiana of encouraging the promotion and establishment of new industries in this area.

We are not opposed to reasonable measures to stimulate foreign trade but we are opposed to "free trade" because it would destroy many American industries, seriously cripple other industries, cause us to exploit our labor and resources, result in widespread unemployment, lower our standards of living, and lessen our military security.

American Sugar Cane League of the U.S.A., Inc.

For efficiency & Accuracy in Precision grading Consider the purchase of a

Lazerplane
by
Spectra-Physics

- Shorten your completion time
- reduce manhours per project
- easy to operate
- Eliminates costly overcutting

contact

ALLEE, ALLEE & ALLEN, Agent
P.O. BOX 108
ST. JAMES, LA. 70086
504/265-3965

Tell Them
You Saw It In
THE
SUGAR BULLETIN

CANE TRACTOR PARTS
We ship & locate parts nationwide.

New, Used and Rebuilt Hi Crop and Row Crop Tractor Parts, Tires, Rebuilt Clutches, Crank Shafts, Injector Pumps and More. Also Any Hard-To-Find Parts. We Buy Farm Equipment & Salvage Tractors.

SAVE 50% & More!

CANE TRACTOR PARTS
Toll Free 1-800-738-2263 **Hwy. 90**
(318) 276-3453 **(318) 276-6230** **Jeanerette, LA**

 (Continued from page 8)

to be considered will be the temptation to treat some of this excessive plant cane acreage with Polado since some of these acres will have to be cut early. We will attempt to clarify the Polado label which currently allows for use only in stubble crops.

LONG RANGE PLANNING COMMITTEE

During the summer of 1990, the Long Range Planning Committee of the American Sugar Cane League, chaired by Dr. Daniel Viator, met several times to discuss long term strategies to address the following problems:

1. The proposed 10% reduction in the sugar loan rate.
2. Domestic sweetener expansion as it could result in the sugar program self-destruction.
3. Uruguay Round of GATT negotiations as it could drastically change the sugar program.
4. The government's long range plan of total elimination of all government intervention in domestic sugar programs, thereby placing sugar in a global economy.

At its July 9, 1990 meeting, it was decided that the Long Range Planning Committee should adopt as its mission the formulation of a plan for the Louisiana sugar industry to survive and prosper beyond the turn of the century. The following 3 goals were established:

1. *Short term* — servive should a reduction in the loan rate become reality.
2. *Mid term* — become at least as efficient as the most efficient domestic beet and/or cane operations.
3. *Long term* — become more competitive in a global economy.

At the August 3, 1990 meeting, a subcommittee of the long Range Planning Committee, hereinafter called the Action Committee, was appointed to investigate areas in which the Louisiana sugar industry could be improved to meet the challenges that will be faced in the future. Mr. Gilbert Durbin accepted the position of Chairman of the Action Committee with the following members:

Dr. Daniel Viator, Chairman of the Long Range Planning Committee
Dr. Art Heagler, Louisiana Agriculture Experiment Station
Dr. Harold Birkett, Louisiana Agriculture Experiment Station
Dr. Freddie Martin, Louisiana Agriculture Experiment Station
Dr. Ben Legendre, USDA Agriculture Research Service
Mr. Dalton Landry, Louisiana Cooperative Extension Service
Mr. Pete deGravelles, Jr., American Sugar Cane League
Dr. Charley Richard, American Sugar Cane League
Mr. Windell Jackson, American Sugar Cane League
Mr. Herman Waguespack, Jr., American Sugar Cane League

On August 14, an organizational meeting for the Action Committee was held with Chairman Durbin and Messrs. deGravelles and Richard. The following five point plan was adopted for the committee's plan of work.

1. Each member of the Action Committee will be assigned the task of:
   a. exploring in depth one or more of the possible ways agreed upon a;s ways to increase efficiency.

(Continued on page 19)

 (Continued from page 18)

b. preparing a concise written report to the Action Committee which will include a review of literature of previous work done in the area under study, consultation with persons who are or were involved in research in the area, and the Action Committee member's evaluation of the advisability of spending more money for research in that area.

2. After studying the reports from individual members, the Action Committee should consult with whatever other individuals it deems advisable.
3. Report to the Long Range Planning Committee and Central Research Committee. The report should include recommendations for areas of research, listed in order of priority. The rationale for each recommendation should be included, with funding estimates.
4. Implementation: When a recommendation has been approved by the Board of Directors, the Action Committee will work with the person(s) chosen to perform the research project.
5. The Action Committee will request progress reports on research projects as it deems desirable.

Potential solutions were listed and circulated to the committee. These solutions formed the basis for a list of Possible Ways to Increase the Efficiency of the Louisiana Sugar Industry. This list was adopted at the September 4 meeting of the committee and amended during subsequent meetings. Copies of the list were circulated to the Board of Directors at their September 28 meeting. Each topic was assigned to one or more members of the Action Committee. This list appears below with the Action Committee Member to whom it was assigned.

POSSIBLE WAYS TO INCREASE THE EFFICIENCY OF THE LOUISIANA SUGAR INDUSTRY

I. GENERAL

1. The purpose and goal of this study is to provide the information necessary to create a more efficient Louisiana Sugar Industry. With the emergence of the twenty-first century and the changes that will occur in agriculture, radical reforms may be necessary for the survival of the sugar industry. These reforms may include but will not be limited to more efficient size factories, more efficient size farms including better utilization of total land and improved record keeping by computerization with accompanying software. A longer processing season would increase efficiency of factories and farms. The Louisiana Sugar Industry will be compelled to achieve the maximum in cost efficiency. *(Heagler)*

II. FACTORY EFFICIENCY

2. More efficient energy utilization in the factory and co-generation. *(Birkett)*
3. A method of recovering sugar now left in bagasse, blackstrap molasses and filter cake. *(Birkett)*
4. Use of diffusion in cane processing. *(Birkett)*

(Continued on page 20)

FARM NOTES *(Continued from page 19)*

5. Economics of producing alternate fuels/byproducts (including cattle feed, ethanol, pharmaceuticals, etc.) from sugarcane/sugar. *(Birkett)*
6. Processing sugar beets. *(Birkett)*
7. Processing sweet sorghum as:
   a. a sugar crop,
   b. for ethanol production. *(Birkett)*
8. Quality and operations control. *(Birkett)*

III. PRODUCTION EFFICIENCY

9. Varieties that:
   a. Mature earlier. *(Legendre)*
   b. Have higher sucrose. *(Legendre)*
   c. Produce higher tonnage in second and older stubble crops. *(Legendre)*
   d. Have more freeze resistance/ frost tolerance in mature stalks and leaf tissue. *(Legendre)*
   e. Better adapt to mechanical harvesting. *(Martin)*
   f. Have high biomass potential. *(Legendre)*
   g. Have increased disease resistance. *(Martin)*
   h. Have increased insect resistance. *(Martin)*
   i. Have increased herbicide tolerance. *(Legendre)*
   j. Better adapt to billet planting. *(Martin)*
10. Chemicals and biotechnology to develop/promote:
    a. Earlier maturity. *(Legendre)*
    b. Higher sucrose. *(Legendre)*
    c. Higher tonnage in second and older stubble crops. *(Legendre)*
    d. Have more freeze resistance/ frost tolerance in mature stalks and leaf tissue. *(Legendre)*
    e. Pest/disease resistance. *(Legendre)*
    f. Cytological studies and molecular biology to enhance breeding efforts. *(Richard)*
    g. Drought resistance. *(Martin)*
    h. Herbicide tolerance. *(Martin)*
    i. Synthetic seed technology. *(Martin)*
    j. Improved flowering control to enhance breeding efforts. *(Martin)*
    k. Nitrogen fixation. *(Martin)*
11. Earlier cross evaluation to enhance varietal development. *(Martin)*
12. Factors associated with making higher yielding:
    a. second and older stubble crops,
    b. succession planted cane. *(Landry)*
13. A method of making spring planting of cane practical, including planting single eye pieces. *(Waguespack)*
14. Economics of producing sugarcane on marginal lands. *(Richard and Heagler)*
15. A mechanical planter that reduces seed damage and amount of seed used. *(Jackson)*
16. Growing sweet sorghum as:
    a. a sugar crop,
    b. for ethanol production. *(Martin)*
17. Growing sugar beets. *(Legendre)*
18. Better use of fallow land through alternate crops. *(Richard and Heagler)*

(Continued on page 21)

FARM NOTES *(Continued from page 20)*

19. More efficient and environmentally sound use of fertilizers and pesticides. *(Richard)*

IV. HARVESTING, LOADING AND TRANSPORTATION EFFICIENCY

20. A harvesting/loading system that will reduce trash. *(Richard)*
21. Transportation Efficiency:
    a. Highway licensed equipment,
    b. Highway non-licensed equipment,
    c. Rail. *(Heagler)*
22. Reducing transportation losses in the field and on highways. *(Richard)*
23. Reducing sugar losses on mill yard by use of rolling storage or a containerized hauling system. *(Birkett)*

V. ENVIRONMENTAL INTERACTION *(Richard)*

In the next issue of the Sugar Bulletin, I will cover the conclusion of the Action Committee's report and the measures adopted by the Long Range Planning Committee.

Liquid Fertilizers
For Sugar Cane

OUACHITA FERTILIZER

NEW IBERIA, LA. (318) 367-8233

MODEL 1162-H FORD COUNTRY

HIGH CLEARANCE
6 CYLINDER DIESEL ENGINE
127 HORSE POWER
11.00 X 16 FRONT TIRES
20.8 X 16 R.I. REAR TIRES
9600 LB LIFT CAPACITY
DELUXE SEAT • ROLL BAR
35[M] CROP CLEARANCE
GEAR TYPE DROP HOUSINGS

PRICED TO SELL
OUT OF TOWN CALL TOLL FREE

1-800-969-0068

M & L INDUSTRIES INC.

1210 ST. CHARLES ST.
HOUMA, LA 70360
PHONE (504) 876-2280

FERTILIZER AND SOIL FERTILITY PRACTICES

(Continued from page 15)

increase during recent years because of economic reasons. A brief discussion on broadcast versus band application may be helpful.

Phospate — Broadcast application of phosphate fertilizer should not be made if the pH value of the soil is below 5.0 and the soil test for phosphorus is low. At low pH values, especially below 5.5, phosphorus becomes fixed in forms not available to plants. On soils with pH values of 6.0, testing medium in phosphorus, broadcast application could be made. It should be pointed out that the efficiency of phosphorus uptake is usually lower for broadcast applied than for band applied phosphate.

Potash — On most soils in the sugarcane area, broadcast application of potassium should provide good results.

In a broadcast application, it is suggested that the fertilizer be applied after cane has been off-barred and before rebuilding the row. This will result in a simi-banding of fertilizer. Rates of fertilizer should be increased 20-25% when using a broadcast application.

Split Application of Nitrogen — Split applications by applying two-thirds of the N in early April and the remainder at lay-by may be beneficial. This is true only when using high N rates in high tonnage cane that is free of weeds. A late N application can increase cane yield, but may delay cane maturity early in the harvest season.

Fall Application — The application of fertilizers in the fall is recommended only in cane planted in succession following a cane crop. Research has shown that a 90-90-90 fertilizer applied in the planting furrow of succession cane can increase cane yield. Succession cane should be fertilized in the spring as per recommendations in Table I when soil test results are not available.

Other Soil Fertility Practices

Liming

Where the soil pH is below 5.5, lime should be used according to soil test recommendations. Liming materials may include agricultural limestone, dolomitic limestone and cement kiln dust. In addition to raising the soil pH, cement kiln dust supplies enough additional potassium for the plant cane crop and enough additional sulphur for the plant cane and two stubble crops. Lime should be applied only when the soil pH and lime requirement from a soil test are known.

Gypsum

Gypsum (hydrated calcium sulphate) is recommended for application in areas where a response to sulphur may occur.

It should be applied broadcast at a rate of one ton per acre on medium-heavy to heavy soils during the fallow year prior to planting. Sources of by-product gypsum are available in Louisiana. If the by-product gypsum is applied at rates recommended, annual maintenance fertilizer sulphur shown in Table 1 would not be needed.

(See Table 1 on page 23)

Take Stock In America
Buy Higher Paying
U. S. SAVINGS BONDS

TABLE 1. Suggested general fertilizer recommendations for weak (for low plant population) and for strong (good plant population) stands of stugarcane when soil tests results are not available[1]. Fertilizer recommendations based on current soil test results will result in more profitable yields.

		PLANT NUTRIENTS IN LB/ACRE							
		N		P_2O_5		K_2O		S[1]	
	SOIL	Cane Stand		Cane Stand		Cane Stand		Cane Stand	
SOIL AREAS	TYPE	Weak	Strong	Weak	Strong	Weak	Strong	Weak	Strong
		PLANT CANE							
Mississippi River and Bayou Lafourche	Light	60- 80	80-100	0	0	60	80	0	0
	Heavy	80- 100	100-120	0	0	0	0	0	0
		STUBBLE CANE							
	Light	100-120	120-140	0	0	60	80	0	0
	Heavy	120-140	140-160	20	40	0	0	12	24
		PLANT CANE							
Bayou Teche and Old Terrace	Light	60-80	80-100	0	0	60	80	0	0
	Heavy	80-100	100-120	0	0	60	80	0	0
		STUBBLE CANE							
	Light	100-120	120-140	20	40	60	80	0	0
	Heavy	120-140	140-160	20	40	60	80	12	24

[1] Some areas near industrial plants along the Mississippi River may not need sulphur. If needed, it should be applied in the sulfate form.

 (Continued from page 11)

are weighed and off-loaded into the conveyor system. A microprocessor cane tracker is used to identify the path of the consignment along the conveyor system, passing through the preparation equipment, and finally to the cane sampler which is situated at the top end of the conveyor feeding the prepared cane into the extraction plant. The sampler takes about 60 lb. of prepared cane every 20 seconds until the tracker signals the end of the consignment. This cane is mixed and passed through a subsampler and a final weight of about 20 lb. is taken. This is hand subsampled, finely prepared in a batch shredder and then digested with water in a cold digester. This material is analyzed for brix, pol and fiber to obtain the cane composition. The payment is calculated from these data which are also used in mill control calculations. The actual payment is based on a weekly calculation, taking into account the average composition of cane delivered to the mill over the whole season. Details of these payment systems are also available upon request. I will comment on more papers next month.

One of the problems of undertaking research into factory operations is that the final conclusions and recommendations may seem to be obvious. If this is the case, then why go to all the effort in doing the work? Perhaps it is not really so obvious and all the discussion in the sugar industry literature seems to point this way. The following extract is from the February, 1991 issue of "The Atlantic" —

> "— a doctoral dissertation written by a Stanford student, Daphna Baratz, who took sixteen actual social-science propositions - for example, "People who go to church regularly tend to have more children than people who go to church infrequently"; "Single women express more distress over their unmarried status than single men do" — and asked a group of some forty Stanford undergraduates to indicate, using a numbered scale, just how obvious each proposition was. She also told them that each statement was true (though in fact only half of them were). Baratz then gathered a second group of forty undergraduates, presented them with the opposite of those sixteen propositions, told them that the statements were true, and asked them to rate the statements for obviousness. As you will perhaps have anticipated, the true and false statements were deemed by the two groups of students to be just about equally obvious."

The last thing I want to do is put sugar technology on the same level as social science, but we need to be sure that what we think of as obvious may only be based on limited experience and preconcieved ideas.

PATRONIZE THE
ADVERTISERS
WHO PATRONIZE
THE
SUGAR BULLETIN

e Sugar Bulletin
6 E. Bayou Rd.
bodaux, La. 70301

BULK RATE
U.S. POSTAGE
PAID
PERMIT NO. 43
Thibodaux, La.

SERIALS DEPT.
LOUISIANA STATE UNIV.
LIBRARY
BATON ROUGE LA 70803

The Sugar Bulletin

OFFICIAL BULLETIN OF THE AMERICAN SUGAR CANE LEAGUE OF THE U.S.A.

In This Issue

Up Front With The League by P. J. deGravelles, Jr. 4
1990 Sugarcane Disaster Program 5
Washington Update With Don Wallace 6
Farm Notes by Dr. Charley Richard 8
The Baton Rouge Line by Tom and Linda Spradley 10
In The Factory by Stephen J. Clarke 11
Controlling Weeds in Sugarcane 14

We stand for the encouragement of Home Industries as against Foreign Competition

Vol. 69 — No. 7 APRIL 1, 1991

The Sugar Bulletin

The Official Organ of the American Sugar Cane League of the U.S.A., Inc.

P. J. deGravelles, Jr., Editor and General Manager
Charles A. Richard, Ph.D., Director of Research and Field Representative
Windell R. Jackson, Senior Agronomist
Herman Waguespack, Jr., Agronomist
John Constant, Business Manager
Nannette B. Nickens, Office Secretary
Paul G. Borron, III, Legal Counsel

Washington Representative:
Wallace and Edwards, Inc.
1150 Connecticut Avenue, N.W.
Suite 507
Washington, D.C. 20036
Phone: (202) 331-4331

Baton Rouge Representative:
Spradley and Spradley
6216 Riverbend Boulevard
Baton Rouge, LA 70820
Phone: (504) 766-1359

Editorial and Executive Office:
206 E. Bayou Rd., Thibodaux, LA. 70301
Phone: (504) 448-3707

OFFICERS AND MEMBERS OF THE BOARD OF DIRECTORS OF THE AMERICAN SUGAR CANE LEAGUE

Daniel Viator, Ph.D, Youngsville, LA
President

Branan Beyt, Jeanerette, LA
1st Vice-President

P. J. "Pete" deGravelles, Franklin, LA
Vice President — General Manager

Don Wallace, Washington, DC
Vice President — Government Relations

Patrick Cancienne, Belle Rose, LA
Treasurer

Irving Legendre, Jr., Thibodaux, LA
Secretary

Manuel Acosta, Raceland, LA
Bryan Allain, Jeanerette, LA
J. G. Beaud, Jr., New Roads, LA
Ramon E. Billeaud, New Orleans, LA
Felix Blanchard, New Iberia, LA
Ronald Blanchard, Napoleonville, LA
Neal Bolton, St. James, LA
Lawrence Dugas, New Iberia, LA
Dan Duplantis, Raceland, LA
John F. Gay, Plaquemine, LA
Ronald Gonsoulin, New Iberia, LA
Mike Graugnard, Edgard, LA
Warren Harang, III, Donaldsonville, LA
Roddy Hulett, St. Martinville, LA
Bobby Judice, Franklin, LA
Roger Kahao, Port Allen, LA
Denis Lanaux, Killona, LA
Melvin Landry, New Iberia, LA
A. J. LeBourgeois, Baldwin, LA
D. C. Mattingly, Paincourtville, LA
Jerry McKee, Thibodaux, LA
William S. Patout III, Jeanerette, LA
Kenneth Peltier, Thibodaux, LA
Stanley Pipes, Franklin, LA
R. L. Roane, Jeanerette, LA
Howard Robichaux, Labadieville, LA
Raphael Rodriguez, Franklin, LA
Mel Schudmak, White Castle, LA
Frank Sotile, Donaldsonville, LA
David Stewart, Lakeland, LA
Roland Talbot, Thibodaux, LA
Jackie Theriot, Breaux Bridge, LA
Charles Thibaut, Donaldsonville, LA
Glenn Timmons, Brusly, LA
Carlton Townsend, Bunkie, LA
Eugene Woods, Paincourtville, LA

MAXXUM™

"The New Drain Cleaning Machine"

One of the most durable parts on a MAXXUM tractor is made of paper.

Everything on the new Case International MAXXUM tractors is designed to last, including the 5-year, 5,000-hour warranty on the *entire* tractor.* That's the best warranty in the business, by far.

It just goes to show how much Case International believes in the durability and reliability of MAXXUM tractors.

What makes the MAXXUM tractor so durable? It comes equipped with one of three proven Case International diesel engines. They're durable, dependable and guaranteed to deliver both high torque rise and high fuel economy. You can feel confident knowing that more than 250,000 similar engines are in use around the world. Count on them to perform — trouble-free — for thousands and thousands of hours.

Come in to see the Case International line of MAXXUM tractors today.

* Excluding tires, which are covered by their own manufacturer's warranties. A $200 deductible applies to each repair after the first year.

©JI Case Company 1989

Switzer Sales and Service
Jeanerette, LA
(318) 276-6384

Gremillion's, Inc.
New Roads, LA
(504) 638-6347

Lanier Int'l. Inc.
Abbeville, LA
(318) 893-1988

Baton Rouge, LA
(504) 357-6453

Lemann's Farm Supply Inc.
Thibodaux, LA
(504) 447-3776

Donaldsonville, LA
(504)473-7927

case IH

UP FRONT WITH THE LEAGUE

By P. J. deGravelles, Jr.

At the American Sugar Cane League Board of Directors meeting held on February 27, 1991, the following statement was adopted by the Board as the official Purpose and Work of the American Sugar Cane League of the U.S.A., Inc.

THE PURPOSE AND WORK OF THE AMERICAN SUGAR CANE LEAGUE OF THE U.S.A., INC.

The American Sugar Cane League of the U.S.A., Inc. is a non-profit organization of Louisiana sugarcane growers and processors. Incorporated in 1922, the Louisiana sugar industry was, at that time, threatened with extinction by cane diseases. The primary purpose of the organization at its inception was to provide the industry with an adequate research program to combat the decline of sugarcane yields.

Today, the League's main functions continue to be research, along with legislation, product promotion, education and public relations.

Research is the "life blood" of the sugar industry. The League has a long standing cooperative relationship with the United States Department of Agriculture-Agricultural Research Service and the Louisiana Agricultural Experiment Station. There are a number of memorandums of agreement covering various research projects in which all three agencies participate. An agreement dating back to 1926 under which new cane varieties are developed is still in effect.

The League is active in legislative matters on both national and state levels. In the nation's capital, the League works through its Washington Representative. When sugar legislation is to be considered by Congress, the various segments of the domestic sweetener industry meet, negotiate and upon reaching an agreement, make recommendations to Congress to collectively work for passage of favorable legislation. The League also represents Louisiana sugarcane growers and processors in other matters on the Federal level. State legislative matters which affect the sugar industry are monitored by the League's Baton Rouge Representative. The League works in cooperation with other agricultural and business interests to effectively enact state legislation beneficial to the industry.

Product promotion has recently become an important phase of the League's efforts. As a member of The Sugar Association, a Washington based organization, the League works with other sugar interests to set forth the true health facts of sugar. The Sugar Association provides nationwide advertising through both print and television media to produce the correct sugar message to consumers. These efforts have been beneficial to growers and processors by reversing the downward trend in sugar consumption.

Education and public relations are ongoing activities of the League. "The

(Continued on page 16)

IMPORTANT

1990 SUGARCANE DISASTER PROGRAM

DEADLINE: MAY 1, 1991

Farms that have suffered a loss in 1990 crop sugarcane production, because of the December 1989 freeze, may be eligible for disaster payments if the farm loss is 40% or greater of the expected production. Eligibility determinations will be made on the basis of pounds of processed sugar, with yields also established on a per pound basis for a 3-year period. Sugarcane acreage reports for 1987 through 1990 must be on file. Late filed reports will be accepted. CCC-441 SU Application for 1990 Sugarcane Disaster Benefits must be signed by all producers and landowners by MAY 1, 1991. There will be no extension of this deadline. Contact your local parish ASCS office for details.

WASHINGTON UPDATE WITH DON WALLACE

ASCL REPRESENTATIVES MEET WITH ASCS ADMINISTRATOR ON DISASTER PAYMENTS

League President, Daniel Viator, Mike Graugnard, Legislative Committee Chairman, Paul Borron, League Counsel, Laura Hudson, Legislative Director for Senator J. Bennett Johnston, Pete deGravelles and Don Wallace met in Washington on March 15 with ASCS Administrator Keith Bjerke and members of his staff to discuss the proposed rules with regards to the disaster payments to the Louisiana sugar industry. Among the main points of discussion were deleting the requirement that in order to be eligible for benefits a farm must have been operated by the same producer in 1989 and 1990, and requesting the assurance that the entire 11 million dollars appropriated would be expended. Deadline for comments in the Federal Register was March 25. **TO BE ELIGIBLE FOR DISASTER BENEFITS, YOU MUST SIGN UP AT YOUR LOCAL ASCS PARISH BY MAY 1, 1991.**

MADIGAN SWORN IN AS U.S. SECRETARY OF AGRICULTURE

On March 12, with President Bush in attendance, House Speaker Tom Foley administered the oath of office at the public swearing in of Edward R. Madigan to become the 24th Secretary of the U.S. Department of Agriculture. Don Wallace and Macon Edwards were among the attendees invited by Secretary Madigan to witness the ceremony. His official swearing-in took place on March 8 after the Senate unanimously confirmed the nomination of Madigan on March 7. Madigan was approved by a vote of 99-0, with Senator Strom Thurmond (R-SC) not voting. The previous day, the Senate Agriculture Committee voted unanimously to send the nomination to the floor for consideration.

A 10-term Illinois congressman, Madigan succeeds Clayton Yeutter who resigned to become chairman of the Republican National Committee. During his tenure in Congress, Madigan rose to the top ranking minority position on the House Agriculture Committee and was a senior member of the House Energy and Commerce Committee. At a confirmation hearing held in early March, Madigan was praised for his support of the farm industry, especially family-sized farms. He vowed to be an advocate for farm interests in both domestic and international policy.

"All of us want Ed Madigan's USDA to live up to the promise of the 1990 farm bill — that sound agricultural and environmental policy can be combined in a way that makes sense for farmers and the American public," said Senate Agriculture Committee Chairman Patrick Leahy (D-Vt) in a statement on the Senate floor.

BUSH ASKS FOR FAST TRACK EXTENSION-CONGRESSIONAL HEARINGS BEGIN

President Bush formally asked Congress for a two-year extension of the fast track authority for the GATT trade negotiations by the March 1 deadline. He cited the need for more time to allow the Uruguay Round to move forward, to negotiate a North American Free Trade Agreement and to fulfill objectives of the "Enterprise for the Americas Initiative." "Fast track" authority is used to speed the approval of trade treaties

(Continued on page 7)

WASHINGTON UPDATE

(Continued from page 6)

by allowing Congress to vote on the entire trade package such as the one being negotiated under the GATT. Individual sections of the trade agreement are not subject to debate or amendment by Congress. The extension is automatic unless either the House or Senate pass a resolution disapproving the request. Congress has 60 days to debate and vote on the extension. Senator Ernest "Fritz" Hollings (D-SC) has introduced a resolution of disapproval in the Senate and Representative Byron Dorgan (D-ND) has introduced a similar resolution in the House. Senator J. Bennett Johnston (D-LA) is a co-sponsor of the Hollings resolution. If fast track is extended, the Administration will have an additional 2 years to negotiate an agreement which cannot be amended by Congress.

The House Agriculture Subcommittee on Department Operations, Research and Foreign Agriculture held a hearing on February 28 regarding an extension of the fast track authority. Patrick Mahar, President of the American Sugarbeet Growers Association, spoke on behalf of the U.S. sugar industry against an extension of the fast track authority based on the inequity of across-the-board percentage cuts to internal support levels cut by identical percentages. Mahar stated the EC, whose sugar industry is more heavily subsidized than the U.S. industry, would still retain the advantage of higher support levels. He testified that "Congress must reclaim its authority to amend any section of the final agreement."

On Wednesday, March 13, the Full House Agriculture Committee held its first hearing on President Bush's request for a fast track extension. The hearing focused on the implications for U.S. agriculture of extending fast track authority for congressional review of possible trade agreements, including the Uruguay Round of GATT, a North American free trade agreement between the U.S., Canada, and Mexico, and the President's Enterprise for the Americas initiative. Although the House Ways and Means Committee has jurisdiction over the fast track authority, the goal of the hearing was to air the views of all segments of U.S. agriculture on the Administration's request for an extension of fast track authority.

Witnesses for the extension were the Hon. Carla Hills, U.S. Trade Representative; the Hon. Richard Crowder Under Secretary for International Affairs and Commodity Programs; as well as representatives from the American Farm Bureau Federation, the North American Export Grain Assn., the American Meat Institute, the National Assn. of Wheat Growers, the National Cattlemen's Assn., and the National Corn Growers Assn. Witnesses against extension were representatives from the Florida Sugar Cane League (on behalf of U.S. sugarcane and beet producers, processors and refiners), the National Cotton Council, the National Milk Producers Federation, the Florida Fruit and Vegetable Assn., the National Peanut Growers Group and the National Farmers Union.

So far, many large U.S. companies have supported an extension of the fast track authority, while labor, the textile industry, cotton, sugar, peanuts, dairy and several consumer and environmental groups have voiced opposition to the Administration's request.

(Continued on page 16)

FARM NOTES By Dr. Charley Richard

CONTACT COMMITTEE — PROWL CRISIS LABEL LONG RANGE PLANNING COMMITTEE

The Contact Committee meeting for 1991 is scheduled for June 27 at the Howard Johnson Motor Lodge in Thibodaux. The exact agenda has not yet been set, but we are planning to hear from those scientists who have received research funding from the American Sugar Cane League. The meeting format will be similar to the one used last year and should provide an opportunity for industry members to hear from the scientists on research that, as growers and processors, you have contributed funds towards. Mark your calendars now for Thursday, June 27, 1991. There will be additional information, including times and speakers, in a later issue of the Sugar Bulletin.

PROWL CRISIS LABEL

By now most growers have been informed concerning the labeling of Prowl for 1991. For history's sake let it be recorded here that Prowl has received a Crisis Exemption Label which will allow its use this spring. This action has no bearing on a permanent label which we are told is being considered and could be granted later. Hopefully growers were well advised in their use of Prowl especially as it relates to the incorporation of the material. As the weed scientists at LSU and USDA and the Extension Specialists have pointed out, Prowl works best when incorporated. Growers have gotten excited about the use of this material because if it rains within seven days after application, mechanical incorporation may be eliminated. In either case, Prowl should be applied to loosened beds (free of weeds and trash) and incorporated (mechanically or with rain) into the upper two inches within seven days after application. During the interval between the time Prowl is applied and the time it is incorporated, the material is volatilizing and being lost from the ground. Therefore, growers should not have waited too long for a rain before mechanically incorporating if the rain does not fall. Additional information on application rates and procedures can be found on the label itself which should be in the possession of the user at the time of herbicide application. Other information can be obtained from your local county agent.

LONG RANGE PLANNING COMMITTEE

In the last issue of the Sugar Bulletin I discussed the work of the Long Range Planning Committee and its Action Committee. I listed the items that were studied and now will print the conclusion of that study and the actions that have been taken up to this time.

On December 11, 1990, the final meeting of the Action Committee was held in conjunction with the Long Range Planning Committee and the Central Research Committee. Assignment reports were presented by each member of the Action Committee and written copies are currently filed in the League Office. The following members were present at this joint meeting.

Mr. Gilbert Durbin, *Chairman of the ASCL Action Committee*

Dr. Art Heagler, *ASCL Action Committee Member*

Dr. Harold Birkett, *ASCL Action Committee Member*

(Continued on page 17)

SUGAR

BULLETIN

WANT

ADS

GET

RESULTS

The Sugar Bulletin

206 E. Bayou Road
Thibodaux, LA 70301

Phone:

(504) 448-3707

ATTENTION

ALLEE, ALLEE & ALLEN

Announces Its

Precision Grading Service
Lazerplane Equipped

- ★ Better drainage
- ★ Better weed control
- ★ Increase acreage

Also Agent for

Spectro Physics
Laser Plane Sale

St. James, Louisiana 70086

(504) 265-3965

Tell Them
You Saw It In
THE
SUGAR BULLETIN

CANE TRACTOR PARTS

We ship & locate parts nationwide.

New, Used and Rebuilt Hi Crop and Row Crop Tractor Parts, Tires, Rebuilt Clutches, Crank Shafts, Injector Pumps and More. Also Any Hard-To-Find Parts. We Buy Farm Equipment & Salvage Tractors.

SAVE 50% & More!

CANE TRACTOR PARTS

Toll Free 1-800-738-2263 **Hwy. 90**
(318) 276-3453 **(318) 276-6230** **Jeanerette, LA**

The Baton Rouge Line

By Tom and Linda Spradley

It appears certain now that Gov. Roemer will call two Special Sessions immediately prior to the Regular Legislative Session, scheduled to convene April 15, 1991. The first Special Session is tentatively scheduled to begin April 1 at 7:00 p.m. and continue until April 8 at 5:00 p.m. The second Special Session will begin an hour later, at 6:00 p.m., and will end no later than April 15 at 11:00 a.m.

The first of the Special Sessions will be geared towards renewing the three cent sales tax on groceries and utilities. This tax, in actuality a suspension of the tax exemption for food and utilities, has been in effect since 1986 in some form or another. The current tax will expire on June 30 if not renewed in the Special Session.

The 1974 constitution prohibits levying taxes in regular sessions in odd numbered years. While there is disagreement as to whether the renewal of the suspension of the tax examption mentioned above is a "new" tax and therefore requires a Special Session, the Roemer administration has decided to play it safe and not risk the tax being declared unconstitutional.

Liquid Fertilizers
For Sugar Cane

OUACHITA FERTILIZER

NEW IBERIA, LA. (318) 367-8233

Revenue from the three cent tax, if renewed, will be used to help defray the projected $900 million budget deficit for 1991-92.

The second Special Session will concern reapportionment. As always, this is a very difficult issue for the Legislature, seeing as how many members will either lose a part of their district or gain additional constituents. In either of these scenarios, a legislator could be placed in the position of running for reelection in a district that has a composition no longer predisposed to reelect him to office.

Several legislators are now voicing the opinion that there won't be any legislative elections this fall because the Legislature might not be able to come up with a reapportionment plan and get it approved by the U.S. Justice Department in time. Or, if the Legislature comes up with a plan, that plan might not be acceptable to the Justice Department.

In any case, some very interesting repercussions could be in store. For instance, the Governor's race will not be affected by reapportionment and therefore will be held as scheduled. No matter who is elected Governor, he will face a critical fiscal situation, and many see the first year of the next four year term as the most opportune time to reform the fiscal structure of the state. If the legislative elections have been postponed, however, it is going to be extremely difficult for legislators to focus on any issue other than reelection. The domino effect of this continues on an infinitum.

IN THE FACTORY

PAPERS FROM THE ISSCT PROCEEDINGS

Stephen J. Clarke
Audubon Sugar Institute
Louisiana Agricultural Experiment Station

As the industry strives to become both more efficient and more environmentally responsible, there is available a wide range of options for improvement in these aspects of factory operation. Some would require radical changes in process and/or major capital investment and others may require only modest investment but considerably improved monitoring of process operations. In this and next month's articles, I will expand on both using material from the recently received proceedings of the International Society of Sugar Cane Technologists.

The relative merits of milling and diffusion for extraction continue to be fervently debated. The initial claims for advantages of diffusion over milling — higher extraction and lower energy consumption — may have been exaggerated in some cases, but the technology has now reached maturity and has been the choice of extraction process in some of the most modern mills in the world. The tendency for any industry is to develop the technology with which it is familiar and for extraction by mills this has meant the use of heavier duty mills and more efficient turbines operating at higher steam pressures. In part, the initial success of diffusers in increasing extraction has pushed mill designers to improved performance. For example, the emphasis upon good preparation and imbibition has improved both throughput and extraction of mill tandems. In the introduction to a paper on the steam balance of a diffusion factory the comment is made that diffusion is not generally understood, its advantages are underestimated and it is subject to rejection by many for the wrong reasons. Two important operating parameters for both milling and diffusion are energy demand and sugar recovery. The latter remains the subject for discussion and the former was addressed in one of the ISSCT papers.

The point made by van Hengel ("Diffusion as a Steam Saver") is that the cost of achieving high extraction with milling systems is very high in terms of turbine requirements and boilers. He traces the development of the milling system from relatively small mills with simple knife systems and steam engines to large mills with multi-stage turbines and higher pressure boilers. The first stage was the introduction of single stage turbines with the advantages of increased milling capacity, simpler maintenance and cleaner steam. However, extraction was not improved and could even have been reduced due to the increased load on the mills. The goal of higher extraction led to improved knives and shredders, increased imbibitiom, better feeding and more mills. Higher pressure steam was then necessary and this in turn led to the introduction of new boilers and turbogenerators. Some extra fuel was required but extraction improved significantly. Once these steps had been taken, it was no longer satisfactory to work with two steam pressures. All

(Continued on page 20)

CLASSIFIED

WANTED TO BUY: Small Planter Aids. Phone (318) 346-7710.

FOR SALE:

JD 2630 Tractor — 70 Hp (New Engine)
JD 2030 Tractor — 60 Hp
IH 574 Tractor — 52 Hp
IH 284 Gas Tractor — 22 Hp
IH 244 Diesel — 20 Hp (Turf Tires)
2 — IH 856 Hi Crop Tractor
IH 806 Hi Crop Tractor
IH 1066 Hi Crop Tractor
2 — IH 856 Hi Crop Tractor with Broussard Loader
JD 1650 Diesel Tractor — 55 Hp
2 — Sidewinder Offset Ditchers
IH 1066 Hydrostat with Broussard Loader
Cosmotor "V" Ditcher — PTO Driven
2 — JD 1630 Disc Harrows (16 Ft.)
2 — Chisel Plows — 1 Graham
Other Tractors & Equipment
Call 1-800-738-2263.

WANT TO BUY:

1 — Rayne Plane Land Leveler
Rayne Plane Water Leveler
JD — 1630, 1635 or 1640 Disc Harrows (16 Ft. Wide)
1 — Grain Drill (18-20 Ft.)
6 or 8 Row Lilliston Rolling Cultivators,
4 or 5 Spyder
1 — 6 or 8 Row Do-All with Scratchers
Hi-Crop Tractors, Any Age, Make or Condition
Call 1-800-738-2263.

FOR SALE:

Caldwell Batwing Shredder — $1,000.
3 pt. hitch sideboom hyd shredder, ideal for cutting trees — $2,000.
Transloader Wagon — $300.
Pull type Grader Blade Handlever — $2,800.
23.1 x 26 Tires and Wheels — $150.
8-19 Allis Chamber Tractor — $1,500
650 Allis Chamber Dozer 6-way blade — $6,500
Bush Hog — $150
Double Set Choppers — $150
3 Row Chopper — $1,000
Call Erne Plessala, Jr. at (318) 229-4971

CLASSIFIED

SUGAR CANE FARMING EQUIPMENT AVAILABLE FOR SALE
RETIRED FROM CANE BUSINESS JANUARY 1, 1990

Cameco 2 Row Harvester (CAB & AIR) 2 seasons
Cameco 2 Row Loader (CAB & AIR) 1 season
2 — 2096 Case International (CAB & AIR) Lo-Clear 1000 hrs. (4 yr. warranty)
4386 International 4 WD (New Rubber)
1066 International Hi-Clear (New Rubber)
966 International Lo-Clear w/Cab
John Deere 3 Row Cane Chopper — 1 season
2 — Woods 15 ft. shredders — 1 season
1 — Side winder 7 ft. shredder (tire driven)
1 — Sidewinder 7 ft. shredder (gear box drive)
2 — Hand planting wagons (9 ft. x 24 ft.) Tandem Davis running gear
1 — Hand planting wagon (5 ft. x 20 ft.) Single axle
4 — Davis Tandem Cane Wagons
160 Galion Motor Grader (New 160 Cummins Engine)
Various tools and cane related equipment
1 — 3 Row Hydraulic Shaver — 1 season

CALL JIM RODRIGUEZ (318) 332-3479
after 6:00 p.m.

Take Stock In America

Buy Higher Paying

U.S. SAVINGS BONDS

CONTROLLING WEEDS IN SUGARCANE

A complete chemical program for weed and grass control can help Louisiana growers produce maximum yields of sugarcane when the program is combined with sound agronomic practices such as timely cultivation, selection of adapted varieties, proper fertilization, and disease and insect control.

Herbicides are expensive, and unless they are applied properly and at the right time, they will not provide maximum control of weeds. Spray equipment should be in good condition, properly calibrated (several times during a season), and should have vigorous agitation capability (especially important for wettable powders). Herbicides should also be **accurately** measured or weighed.

When ground equipment is used, herbicides usually should be applied in a band over the top of the row. Apply preemergence herbicides in a band 30 or 36 inches wide and postemergence herbicides in a band 36 inches wide.

Unless stated otherwise, rates for herbicides in this guide are expressed as the amount of formulated herbicide required per acre of sugarcane when applied to a 30- or 36-inch band on 72-inch rows. The table on the last page can be used to select the rate required when herbicides are applied in other band widths or when other row widths are used. If these herbicides are aerially applied, increase the band width rate proportionately to the broadcast rate.

Weed Control at Planting

Herbicides to control weeds, especially johnsongrass seedlings, are essential to prevent weed competition and losses in sugarcane production. Unless herbicides are applied after planting, weed seed remaining in the soil following a fallow program will germinate, producing viable seeds and/or johnsongrass rhizomes. As a result, grasses, especially johnsongrass, will quickly reinfest a field.

Winter grasses and broadleaf weeds are not as competitive as johnsongrass, but they suppress the growth of the cane in the spring and must be removed either chemically or mechanically before regular spring work can proceed.

Selection of herbicides should be based on soil texture and organic matter content, weed problem and the variety of sugarcane. If for some reason preemergence herbicides cannot be applied immediately after planting, apply them at the earliest possible time.

A. Preemergence Control of Johnsongrass Seedlings and Winter Weeds

	RATE/A (30" Band)		
Herbicide	Light Soil	Medium Soil	Heavy Soil
Sencor/Lexone 4L	1.5 pts.	1.5 pts.	1.5 pts.
Sencor/Lexone DF	1.0 lb.	1.0 lb.	1.0 lb.
Sinbar 80W*	.66 lb.	.66 lb.**	.75 lb.

* Do not apply Sinbar on the variety CP 48-103, on soils with less than 1% organic matter, or on soils that have shown previous Sinbar injury.

** Use .75 lb. where heavy johnsongrass infestations are expected.

(Continued on page 15)

These recommendations are made available by Dalton Landry and Dr. Dearl Sanders, Louisiana Cooperative Extension Service, based on data and information from Drs. Rex Millhollon and Ed Richard, USDA Agricultural Research Service, Houma, LA. and Dr. Jim Griffin, Louisiana Agricultural Experiment Station.

Controlling Weeds *(Continued from page 14)*

B. Preemergence Control of Itchgrass
(August Planted Cane Only)

Apply Treflan, Trifluralin or Trilin at 1.7 pts./A (all soil types) and incorporate immediately into the soil to a depth of about 2 inches but above the cane seed pieces. Additional herbicidal treatments should be applied to control winter weeds (Section D).

Note: Treflan will also effectively control browntop panicum and seedling johnsongrass.

C. Preemergence Control of Annual Summer and Winter Weeds

The following herbicides control most annual grasses and broadleaf weeds, but may not control johnsongrass, itchgrass or browntop panicum.

Herbicide	RATE/A (all soil types) (30" band)
AAtrex 80W	1.5 lbs.
Atrazine 80W	1.5 lbs.
Princep 80W	1.5 lbs.
Cotoran 80W	1.5 lbs.
Karmex 80WP	1.5 lbs.
AAtrex 4L	1.2 qts.
Atrazine 4L	1.2 qts.
Princep 4L	1.2 qts.
AAtrex Nine-O	1.33 lbs.

D. Alternate Procedure for August Planted and/or Heat Treated Sugarcane

Generally early planted cane is lightly covered (2 inches of packed soil) and frequently more soil is added before winter. If additional soil will be added, two applications of herbicide may be needed.

The first treatment after planting should be with one of the herbicides in this guide at the lowest rate suggested. For the second treatment, after additional soil is added, apply AAtrex 80W at 1.2 lbs., or Atrazine 4L at 1.0 qt., or AAtrex Nine-O at 1.1 lb.

E. Supplemental Practices

1. After herbicides are applied to the drill cultivate the middle and sides of the row to control weeds.
2. Rogue escaped rhizome johnsongrass plants.
3. Do **not** apply dalapon in the fall.
4. Escaped johnsongrass may be spot treated with Asulox at 6-12 pts. of Asulox in 100 gallons of water. Add .25% nonionic surfactant or 1.0% crop oil concentrate.

Weed Control After Harvest

A. Control of Johnsongrass and Annual Weeds in Cane Cut for Seed and Early Harvested Cane.

1. Preemergence

Herbicide	RATE/A (30" Band) Light Soil	Medium Soil	Heavy Soil
Sinbar*	–	.66 lb.	.75 lb.
Sencor/Lexone 4L	1.5 pts.	1.5 pts.	1.5 pts.
Sencor/Lexone DF	1.0 lb.	1.0 lb.	1.0 lb.

* Do not apply Sinbar on the variety CP 48-103, on soils with less than 1% organic matter, or on soils that have shown previous Sinbar injury.

2. Postemergence (johnsongrass or itchgrass)

Apply Asulox at 2.0 qts./A (36-inch band) plus .25 to .50 percent non-ionic surfactant or 1.0 percent crop oil concentrate by volume to 18-inch johnsongrass or 6-inch itchgrass. For spot treatment, turn boom on and off as necessary.

B. Control of Winter Annual Weeds

Control winter weeds to free emerging cane from weed competition and to provide a clean row for the application of preemergence herbicides in the spring.

(Continued on page 21)

UP FRONT WITH THE LEAGUE

(Continued from page 4)

Sugar Bulletin" is a monthly publication which goes to all members. Articles relating to research, farming and factory practices, a Washington legislative report, a Baton Rouge legislative report and many other articles of interest to the members are carried. The League staff, as well as League members, appear on television and radio broadcasts on behalf of the sugar industry. They also make presentations to schools, civic, professional and fraternal organizations.

The staff of the League is relatively small, since much of the work is done by committees composed of cane growers and processors who willingly give of their time in search of solutions to problems of the Louisiana sugar industry. The League is financed by dues paid by its cane grower, cane processor, landlord and commercial members. The League maintains its office at 206 East Bayou Road, Thibodaux, Louisiana 70301.

WASHINGTON UPDATE

(Continued from page 7)

MINIMUM WAGE RATE TO INCREASE APRIL 1, 1991

The minimum wage rate for employees, including farm workers, will increase as of April 1, 1991. The present wage rate of $3.85 per hour will increase to $4.25 per hour and top out at that level. The minimum wage will not increase above the $4.25 per hour level until the Congress amends the wage and hour law.

GOODYEAR

GOODYEAR TIRES FOR YOUR CAR, TRUCK, FARM OR OFF HWY. EQUIPMENT

NOBODY FITS YOU LIKE GOODYEAR

• 24 HR. ROAD SERVICE
• COMPLETE AUTOMOTIVE CERTIFIED SERVICE
• TRUCK TIRE BALANCE AND ALIGNMENT

SPECIAL
SURE-GRIP TD-8

SUPER TRACTION • SUPER STRENGTH

GENERAL ELECTRIC AUTHORIZED DEALER

7:30 AM - 6:00 PM MON. - FRI.
7:30 AM - 1:00 PM SAT
1203 ST. PATRICK HWY
THIBODAUX

PIT STOP
YOUR ON FARM SERVICE SPECIALIST

GOODYEAR AUTO SERVICE CENTER
1-800-256-1269 (504) 447-2696

 (Continued from page 8)

Dr. Freddie Martin, *ASCL Action Committee Member*

Mr. Dalton Landry, *ASCL Action Committee Member*

Mr. Pete deGravelles, *ASCL Action Committee Member*

Dr. Charley Richard, *ASCL Action Committee Member*

Mr. Windell Jackson, *ASCL Action Committee Member*

Mr. Herman Waguespack, Jr., *ASCL Action Committee Member*

Dr. Daniel Viator, *Chairman of the ASCL Long Range Planning Committee*

Mr. Ronnie Blanchard, *ASCL Long Range Planning Committee Member*

Mr. Roddy Hulett, *Chairman of the ASCL Central Research Committee*

Mr. Bert Beyt, *ASCL Central Research Committee Member*

Mr. Ramon Billeaud, *Chairman of the ASCL Finance Committee*

Mr. Martin Cancienne, *Chairman of the Louisiana Farm Bureau Sugar Advisory Committee*

Following the presentation of reports, the Long Range Planning Committee voted to adopt the following goals as important to the further development of the Louisiana sugar industry. Among these items were some new measures which the committee feels could increase the efficiency of the industry. These involve some projects which are short term in duration, others which are mid term and still others which are long term before their completion. These new measures are indicated with an asterisk in the following list.

MEASURES THAT THE LOUISIANA SUGAR INDUSTRY CAN TAKE TO BECOME MORE EFFICIENT. IN SOME CASES, MORE RESEARCH IS NEEDED. IN OTHER CASES, ONLY ACTION BY GROWERS OR PROCESSORS IS REQUIRED.

1. Enhanced variety development, increased productivity and increased crop protection.
   - A. Emphasis on current breeding objectives.
   - B. Emphasis on increased cane productivity.
   - C. Emphasis on increased crop protection.
   - *D. Study of molecular biology and genetic engineering to enhance commercial variety breeding efforts.
2. Greater utilization of idle (fallow) lands.
   - A. Additional stubble crops.
   - B. Succession planting.
   - C. Alternate crops (sugar beets, soybeans, wheat, sorghum, kenaf, vegetable crops, etc.)
3. Reduced planting costs.
   - A. Improved whole stalk mechanical planters.
   - *B. Varieties and planting practices adaptable to billet planting with fungicides to protect seed pieces during Louisiana winters.
   - C. Mechanical planters to plant billet cane.
4. Improved harvesting, loading and transport systems.
   - *A. Improved mechanical harvesting, loading and transport equipment to decrease field cane losses,

(Continued on page 18)

 (Continued from page 17)

improve cane quality, minimize field and highway spillage, and reduce mill yard losses through rolling/container storage equipment.

*B. Utilization of custom or mill owned equipment in the harvesting, loading and delivery process.

5. Improved financial efficiency through optimum factory and farm size.
   *A. Optimum amount of equipment to satisfy farm acreage.
   *B. Optimum number and size of raw sugar factories.
6. Improved factory efficiency.
   A. Reduce losses in bagasse, filter cake and molasses.
   *B. Quality and operations controls through the use of scales (juice, water and bagasse).
7. Environmental concerns.
   A. Use of sugarcane by-products or waste products (filter cake, bagasse, etc.) and man-made waste products (sewerage sludge, lawn trimmings, etc.) in sugarcane culture.
   *B. Improved farm chemical/fertilizer application technologies and soil conservation practices to reduce ground and surface water contamination and sediment run-off.
   *C. Evaluation of the environmental effects of certain practices such as cane burning on the environment when balanced against the environmental effects of sugarcane production.
   D. Effects of current crop production strategies and chemical usage on wildlife protection, wetlands preservation, and energy conservation.

* = New measures to consider for League funding in 1991.

The Long Range Planning Committee recommended to the Board of Directors of the League that some funds from the Dedicated Research Program be allocated to research proposals which are in areas covered by items with an asterisk in the above list.

It was also recommended that a graduate student be employed to work in the LSU Agricultural Economics and Agribusiness Department under the direction of Dr. Art Heagler to assist with economic studies in all areas of research.

Based upon Action Committee discussion and reports, it was noted that the following high priority items could be studied and/or completed in a short (one or two years) period of time.

1. More older stubble.
2. More succession planting.
3. More custom harvesting for small farms.
4. Rolling storage at the factory, using cane wagons and trailers now in use.
5. Scale (juice, water and bagasse) at factories.
6. More economic research.

It was noted that the following high priority items could be studied and/or completed in an intermediate (three to five years) period of time.

1. More efficient size factories and farms.
2. Cane harvesting, loading and hauling operated and controlled by each factory.

It was noted that the following high priority items could be studied and/or completed in a long (six or greater years) period of time.

(Continued on page 19)

FARM NOTES *(Continued from page 18)*

1. Investment in new research in the following areas that may result in a more efficient Louisiana sugar industry:
   a. cytological studies and molecular biology.
   b. billet planting.
   c. growing of sugar beets.

Additionally, it was noted that in order for this proposal to be successful through its completion, it will be necessary for an in-house person to direct and monitor this program. The committee further recommended that Dr. Charley Richard assume the responsibility of Program Coordinator. This is in addition to his position as Director of Research. As with all other programs, he will be assisted by League Agronomists Windell Jackson and Herman Waguespack, Jr. The recommendations of the Long Range Planning Committee were accepted at the 12/19/90 meeting of the Board of Directors of the American Sugar Cane League.

The Dedicated Research Program for 1991 is now underway and research has been funded in some of these new areas. From time to time we will publish results of research activities recommended by the Long Range Planning Committee in the Sugar Bulletin.

The League Staff and the Long Range Planning Committee would appreciate hearing from members of this industry if they have any suggestions or thoughts concerning these goals which we hope will provide for the long term existence of the Louisiana sugar industry.

MODEL 1162-H FORD COUNTY

HIGH CLEARANCE
6 CYLINDER DIESEL ENGINE
127 HORSE POWER
11.00 X 16 FRONT TIRES
20.8 X 16 R.I. REAR TIRES
9600 LB LIFT CAPACITY
DELUXE SEAT • ROLL BAR
35[M] CROP CLEARANCE
GEAR TYPE DROP HOUSINGS

PRICED TO SELL
OUT OF TOWN CALL TOLL FREE

1-800-969-0068

M & L INDUSTRIES INC.

1210 ST. CHARLES ST.
HOUMA, LA 70360
PHONE (504) 876-2280

 (Continued from page 11)

steam, was produced at high pressure and the back pressure was also increased to cope with the increased evaporation loads. Extraction was now between 97 and 98% and live steam consumption was reduced to 48% on cane. With some variations these developments generally describe the course taken by the Australian and South African sugar industries. The comment is that the cost has been extremely high.

Van Hengel then describes how the use of a diffuser system could avoid the high cost of the additional steam production and utilization. The solution he proposes is the situation in which no new boilers or turbo-generators are required, preparation is improved and only two mills remain in operation and are driven by simple turbines. The rest of the mills are replaced by a diffuser. The same extraction, between 97 and 98%, is possible as with a sophisticated milling tandem, but at a fraction of the cost. He comments that it is ironic that diffusion, despite its higher consumption of low pressure vapor, is well suited to save on the use of steam to drive prime movers of low internal efficiency such as mill turbines. The conclusion of the paper emphasizes an unfamiliar aspect of diffusion, that its introduction may avoid the necessity for high pressure boilers and matching turbo-generators, when considering an increase in extraction efficiency. There is, he claims, no reason why a traditional factory should not achieve a 3 to 6% increase in sugar production at very reasonable cost and without the fear of having to use additional fuel. There is only limited discussion of the subject of purchasing or generating the electric power required by the factory.

The data given for the South African factories indicate little difference between diffuser factories and mill factories for overall recovery, final molasses purity and undetermined losses.

On the other side of the debate, there is a paper on the development of a six-roller self-setting extraction unit by de Assis (Dedini). A six roller mill should require less floor space than two conventional mills, eliminating part of the intermediate conveyors and reducing gears, therefore costing less. The unit would be driven by a single turbine. A pilot plant unit has been constructed with 15"x15" rollers and a capacity of about ten tons of cane per hour. Imbibition water is put into the Donnelly chute feeding the unit and in the turn plate between the two upper rollers. With cane of 12.5% fibre and imbibition % cane of 246%, a reduced extraction of 88% was achieved with one six roll unit. They are planning a scaled up version of this system.

Next month I will deal with some papers on heaters and evaporators, especially on the problem of entertainment. Copies of any of these papers are available upon request.

Controlling Weeds *(Continued from page 15)*

1. Chemical Removal

Preemergence herbicides should be applied in the fall or winter; postemergence herbicides should be applied in the spring.

a. Preemergence*

Herbicide	RATE/A (36" band)
Atrazine 80W	1.25 lbs.
Atrazine 4L	1.0 lb.

* Use of preemergence herbicides may eliminate the need to remove large winter weeds in the spring with phenoxy herbicides.

b. Postemergence*

Herbicide	RATE/A (36" band)
Atrazine 80W*	1.25 lbs.
Atrazine 4L*	1.0 qt.
2, 4-D amine	1.0 qt.
Weedmaster	1.0 qt.
Banvel + 2.4-D amine	1.0 pt. + 1.0 qt.
Evik 80W*	1.0 – 1.5 lbs.

*Add .25% surfactant or 1.0% crop oil concentrate.

2. Mechanical Removal

Both grasses and broadleaf winter weeds can be removed by mowing or false shaving. Apply preemergence herbicides immediately after removal to prevent new weed growth.

Spring Weed Control

A. Preemergence control of Seedling Johnsongrass in Plant Cane

Apply one of the following herbicides immediately after the row is off-barred and rebuilt. The following treatments will control most summer annual weeds.

Herbicide	RATE/A (30" Band) Light Soil	Medium Soil	Heavy Soil
Sinbar	.66-.75 lb.**	.66-.75 lb.	.75-1.0 lb.
Sencor/Lexone 4L	1.5-2.0 pts.	1.5-2.0 pts.	2.0-2.5 pts.
Sencor/Lexone 75DF	1.0-1.3 lbs.	1.0-1.3 lbs.	1.3-1.66 lbs.
Treflan, Trifluralin or Trilan*	1.66 pts	1.66 pts.	1.66 pts.

* Use Weedmaster or 2, 4-D at 1.0 qt./A or Atrazine 80W at 1.0 lb./A for broadleaf weed control. Treflan, Trifluralin or Trilin must be incorporated. Atrazine should not be incorporated.

** Apply only on light soils that have not shown previous Sinbar injury and soils with more than 1% organic matter.

B. Preemergence Control of Seedling Johnsongrass and Annual Weeds in Stubble Cane

Apply one of the following herbicides immediately after the row is off-barred and rebuilt.

Herbicide	RATE/A (30" Band) Light Soil	Medium Soil	Heavy Soil
Sinbar	1.0 lb.*	1.0 lb.	1.3 lbs.
Sencor/Lexone 4L	2.0 pts.	2.0 pts.	2.5 pts.
Sencor/Lexone 75DF	1.3 lbs.	1.3 lbs.	1.66 lbs.
Treflan, Trifluralin or Trilan**	1.66 pts.	1.66 pts.	1.66 pts

If emerged broadleaf weeds are present, add Weedmaster or 2, 4 D (amine) at 1.0 qt./A.

* Apply only on light soils that have not shown previous Sinbar injury and soils with more than 1% organic matter.

** Must be mechanically incorporated and do not control most broadleaf weeds.

C. Postemergence Control of Rhizome Johnsongrass, Escaped Seedling Johnsongrass and Other Grasses

The following programs are designed to control grasses. When broadleaf weeds are also a problem, add one of the following: Weedmaster or amine 2, 4-D at 1.0 qt./A.

1. Ausulox

a. First Application: Apply Asulox at 4.0 pts./A in a 36-inch band. Adjust nozzles for complete coverage. Apply when most johnsongrass is 18 to 24 inches tall and before flowering. A non-ionic surfactant at .25 percent to .50 percent by volume or a crop oil concentrate at 1.0 percent by volume may be added.

(Continued on page 22)

 (Continued from page 21)

b. Second Application: Apply a second application of Asulox at 3.5 pts./A in a 36-inch band plus surfactant or crop oil concentrate when johnsongrass has exhibited abundant new growth (usually about eight weeks after first application). A second application will increase control but may not increase yield over a single application.

Asulox may be aerially applied. Apply as with ground equipment but increase the rate to 6.0 to 8.0 pts./A. Total spray volume should be increased by 10 percent to allow for ditchbanks and headlands. **Note:** Occasional sugarcane injury may occur from Asulox applications if sugarcane is stressed from drought, excessive temperature or flooded soils, particularly when applied after mid-May. The variety CP 72-370 appears to be more sensitive than other varieties to late (after mid-May) applications.

2. Dalapon-Asulox Mixture in Stubble Cane

A mixture of dalapon and Asulox may give better control of johnsongrass than Asulox alone. Apply a mixture of Asulox at 2.5 to 3.5 pts./A plus dalapon at 1.5 to 2.0 lbs./A on a 36-inch band. Add a non-ionic surfactant at .25 percent by volume or 1.0 percent crop oil concentrate. Do **not** apply dalapon after mid-May. (Dalapon may cause stunting and yield reduction.)

D. Control of Annual Weeds, Itchgrass, Browntop Panicum and Bermudagrass

1. Annual Weeds and Grasses

Apply the following herbicides where johnsongrass or itchgrass is **not** a problem.

Herbicide	RATE/A (30" Band) Light Soil	Medium Soil	Heavy Soil
Sencor/Lexone 4L	1.0 pt.	1.0 pt.	1.5 pts.
Sencor/Lexone 75DF	.66 lb.	.66 lb.	1.0 lb.
Sinbar	.5 lb.*	.5 lb.	.5 lb.
AAtrex 80W	1.5 lbs.	1.5 lbs.	1.5 lbs.
Princep 80W	1.5 lbs.	1.5 lbs.	1.5 lbs.
Cotoran 80W	1.5 lbs.	1.5 lbs.	1.5 lbs.
Karmex 80W	1.5 lbs.	1.5 lbs.	1.5 lbs.
Treflan, Trifluralin or Trilin**	1.66 pts	1.66 pts.	1.66 pts.

* Apply Sinbar only to light soils that have not shown previous Sinbar injury

** Must be mechanically incorporated and does not control most broadleaf weeds.

2. Itchgrass

A. Preemergence — Treflan, Trifluralin or Trilin

Apply one of the above at 1.66 to 2.0 pts. in a band 30 to 36 inches wide to a clean drill before itchgrass germinates. Incorporate into soil above the sugarcane with a rolling cultivator (about 2 inches deep) immediately after application. Shave or mow to remove excessive stubble or weedy growth and loosen hard-packed soil before application.

B. Alternate Preemergence Herbicides (generally not as effective as Treflan treatment)

If the application and incorporation of Treflan, Trifluralin or Trilin are not feasible, apply one of the following:

1. TCA — Apply 3.5 pts. TCA + 1.0 qt. 2, 4-D. Repeat in four weeks. If itchgrass has germinated, add 2.0 lbs. A Dowpon M.

(Continued on page 23)

 (Continued from page 22)

2. Velpar (Stubble Cane) — Apply .5 lb./A Velpar on medium soils and .66 lb./A on heavy soils. Do **not** apply to light soils. Varieties CP 65-357 and CP 72-370 are sensitive to Velpar.

C. Postemergence

Apply the following when the largest itchgrass plants are 6 inches tall. Apply Asulox at 3.5 pts./A on a 30-inch band or Asulox at 2.5 to 3.0 pts./A plus Dowpon M at 1.5 to 2.0 pounds. Add a non-ionic surfactant at .25 to .50 percent by volume or 1.0 percent crop oil concentrate. Do **not** apply Dowpon to any cane after mid-May.

3. Browntop Panicum

Browntop panicum is not controlled by Sinbar, and Fenatrol is no longer available. The following control methods are recommended where browntop panicum is a problem.

A. Preemergence

Apply Treflan, Trifluralin or Trilin at 1.66 pts./A. Incorporate immediately with a rolling cultivator. If one of the above cannot be used, apply Sencor/Lexone 4L at 2.0 to 2.5 pts./A or Sencor/Lexone 75DF at 1.3 to 1.66 lbs./A.

B. Postemergence

1. Evik 80W — Apply at 1.0 lb./A as a directed spray **only** to a 24-inch band. Add .5 percent non-ionic surfactant or 1.0 percent crop oil concentrate by volume. Do not allow spray to contact cane, or injury may result.
2. Dowpon M — Apply Dowpon M at 1.0 to 1.5 lbs./A as a directed spray.

4. Bermudagrass

In addition to preemergence treatments, treat fields infested with bermudagrass with a directed spray of the following.

a. Dowpon M at 2.25 lbs./A.
b. TCA at 3.0 pts./A + Dowpon M at 1.0 lb./A.

A second application may be needed for best control. Avoid spray contact with cane, and apply before mid-May.

Layby Weed Control

A. Preemergence at Layby

Application of preemergence herbicides at layby may be desirable in fields having late season weed problems. Problem weeds include morningglory, johnsongrass, itchgrass, browntop panicum and other annual grasses. Apply one of the following herbicides broadcast following the final cultivation.

	RATE/A (broadcast)		
Herbicide	Light Soil	Medium Soil	Heavy Soil
AAtrex 80W*	2.0 lbs.	2.0 lbs.	3.0 lbs.
AAtrex 4L	1.6 qts.	1.6 qts.	2.4 qts.
Princep 80W	2.0 lbs.	2.0 lbs.	3.0 lbs.
Sinbar	1.0 lb.**	1.0 lb.	1.0 lb.
Sencor/Lexone 4L	2.0 pts.	2.0 pts.	2.5 pts.
Sencor/Lexone 75DF	1.3 lbs.	1.3 lbs.	1.66 lbs.
Treflan, Trifluralin or Trilin***	3.0 pts.	3.0 pts.	3.0 pts.

* AAtrex used as layby for morningglory control has in many instances eliminated the need for a 2, 4-D application.

** Do not use Sinbar on light soils unless previous use has indicated no injury problem.

*** Must be mechanically incorporated and do not control most broadleaf weeds.

B. Postemergence at Layby

Apply amine 2, 4-D broadcast at 1.5 qts./A for morningglory (and other susceptible broadleaf weeds). Avoid drift to non-target areas.

(Continued on page 24)

Controlling Weeds *(Continued from page 23)*

Fallowed Fields Weed Control

Several herbicides are labeled for use in fallowed sugarcane fields. These herbicides may be used in conjunction with fallow plowing or to substitute for part of the fallow plow program. The fallow year is important in controlling johnsongrass, itchgrass, bermudagrass and other weeds by killing johnsongrass rhizomes and reducing weed seed reserves in the soil.

A. Fallow Preemergence

After bedding in May or June, apply to a weed free bed:

Herbicide	RATE/A (broadcast) Light Soil	Medium Soil	Heavy Soil
Sencor/Lexone 4L*	2.0 pts.	2.5 pts.	3.0 pts.
Sencor/Lexone 75DF*	1.3 lbs.	1.66 lbs.	2.0 lbs.
AAtrex 80W**	2.5 lbs.	2.5 lbs.	2.5 lbs.

* Do not use where itchgrass is a problem.

** Do not use where johnsongrass, itchgrass or browntop panicum is a problem.

B. Fallow Postemergence

To reduce fallow plowing or if fallow plowing is not possible or to destroy existing sugarcane stubble, apply broadcast:

1. *Roundup* — Apply 1.0 to 2.0 qts./A in 5-20 gallons of water, add .25 percent non-ionic surfactant by volume. Do not cultivate for seven days after application. **Use extreme caution if applied by air.**
2. *Dowpon M* — Apply 6.0 to 8.0 lbs./A Dowpon M. Add .25 to .50 percent non-ionic surfactant by volume. Do not cultivate for seven days after application. Apply to johnsongrass less than 24 inches tall and before seed formation. **Do not plant cane for three weeks following application.**

Problem Weeds on Ditchbanks

Problem weeds such as johnsongrass, itchgrass, bermudagrass and equisetum (popping weed) should be controlled on ditchbanks to prevent infestation into adjacent fields. Apply one or more of the following:

1. *MSMA* — Apply 4.0 lbs./A active ingredient + .25 percent non-ionic surfactant by volume. MSMA will control johnsongrass and itchgrass but not bermudagrass. Repeat as necessary.
2. *Dowpon M* — Apply 10.0 lbs./A + .25 percent non-ionic surfactant by volume. Dowpon M will control johnsongrass, itchgrass and bermudagrass.
3. *Roundup* — Apply 1.0 to 2.0 qts./A + .25 percent non-ionic surfactant by volume for johnsongrass and other weeds, use 3.0-5.0 qts./A for bermudagrass.

Control of equisetum (horsetail or popping weed) is difficult. The following herbicides that temporarily sterilize the soil have controlled this weed.

1. Velpar at 6 to 12 lbs./A.
2. Spike at 10 to 20 lbs./A.
3. Hyvar X at 10 to 15 lbs./A.

Do not apply any of the above closer than six feet from the first row of cane.

Promising control of young (1-to 2-year-old) equisetum with a tank mixture of Weedmaster at 2.0 qts./A plus MSMA at 2 lbs. a.i./A plus .25 percent non-ionic surfactant by volume. This treatment will not sterilize the soil or seriously injure adjacent cane.

(Continued on page 25)

Controlling Weeds *(continued from page 24)*

CHEMICALS REFERRED TO IN THE RECOMMENDATIONS

COMMON NAME	TRADE NAME	CHEMICAL NAME
Ametryn	Evik 80W	2-(ethylamino)-4-(isopropylamino)-6-(methylithio)-s-triazine
Asulam	Asulox	Sodium salt of asulam (ethyl sulfanilyl-carbamate)
Atrazine	AAtrex 80W AAtrex 4L AAtrex Nino-O Griffex 4L Griffex 9 DF	2-chloro-4, ethylamino-6, isopropylamino-s-triazine
Bromacil	Hyvar X 80WP	5-bromo-3-sec-buty1-6-methyluracil (5-bromo-6-methyl-3-(1-methylpropyl) uracil)
Dalapon	Dowpon M	Sodium salt of 2,2-dichloropropionic acid
Diuron	Karmex 80W	3-(3, 4-dichlorophenyl)-1-dimethylurea
Fenac	Fenatrol Fenac	Sodium salt of 2,3-6, -trichlorophenyl-acetic acid
Fluometuron	Cotoran 80WP	3-(m-triflurомethylphenyl)-1, 1-dimethylurea
Glyphosate	Roundup	N-(phosphonomethyl) glycine
Hexazinone	Velpar 90SP Velpar 2L	3-cyclohetyl-6-(dimethylamino)-1-methyl-1, 3, 5-triazine-2, 4 (1H, 3H)-dione
Metribuzin	Sencor 4 Sencor 75DF Lexone 4L Lexone DF	4-amino-6-tert-butyl-3-(methylthio)-as-triazine-5(4H)one
Simazine	Princep 80WP Princep Caliber 90	2-chloro-4, 6-bis(ethylamino)-s-triazine
Tebuthiuron	Spike 80W	N-[5-(1, 1-(1, 1-dimetlylethyl)-1, 3, 4-thiadiazd-2-yl]-N, N'-dimethylurea
Terbacil	Sinbar 80W	3-tert-butyl-5-chloro-6-methyluracil
TCA	TCA	Sodium salt of trichloracetic acid
Trifluralin	Treflan Trifluralin Trilin	a, a, a, trifluro-2, 6-dinitro-N, N,-dipropyl-p-toluidine
Weedmaster	Weedmaster	Mixture of Dicamba-(Dimethylamine salt of 3, 6-dichloro-o-anisic acid) and 2, 4-D (dimethylamine salt)
2, 4-D	Numerous	Amine or low volatile esters of 2, 4-di-chlorophenoxyacetic acid

(Continued on page 26)

Controlling Weeds *(Continued from page 25)*

Rates of herbicides presented are based on amount of formulated product for a 30-inch band on a 72-inch wide row. To obtain the amount of herbicide product required to treat other band widths and row widths, consult the table. Conversions are applicable whether measurements are expressed in pounds, pints, or quarts per acre.

PROPORTIONATE RATES OF HERBICIDES PER ACRE OF SUGARCANE FOR VARIOUS BAND AND/OR ROW WIDTHS

72-inch rows			66-inch rows		
Rate of Formulated Herbicide Product Per Acre in Pounds, Pints, Quarts.					
30-inch band	36-inch band	Broadcast	30-inch band	36-inch band	Broadcast
0.66 (2/3)	0.80	1.60	0.73	0.87	1.60
0.75 (3/4)	0.90	1.80	0.82	0.98	1.80
0.80	0.96	1.92	0.87	1.04	1.92
1.00	1.20	2.40	1.10	1.31	2.40
1.33	1.60	3.20	1.50	1.80	3.30
1.50	1.80	3.60	1.64	1.96	3.60
1.66	2.00	3.98	1.81	2.17	3.98
2.00	2.40	4.80	2.18	2.62	4.80
3.00	3.60	7.20	3.27	3.93	7.20
4.00	4.80	9.60	4.36	5.24	9.60

IF HERBICIDES ARE HANDLED OR APPLIED IMPROPERLY, OR IF UNUSED PORTIONS ARE NOT DISPOSED OF SAFELY, THEY MAY BE INJURIOUS TO HUMANS, DOMESTIC ANIMALS, DESIRABLE PLANTS, AND FISH OR OTHER WILDLIFE, AND MAY CONTAMINATE WATER SUPPLIES. USE HERBICIDES ONLY WHEN NEEDED, AND HANDLE THEM WITH CARE. FOLLOW THE DIRECTIONS AND HEED ALL PRECAUTIONS ON THE CONTAINER LABEL.

(Continued on page 27)

PATRONIZE THE AVERTISERS WHO PATRONIZE

THE SUGAR BULLETIN

Controlling Weeds *(Continued from page 26)*

The values listed are estimates of the degree of weed control that should be obtained with a specific herbicide(s) on selected weeds under average conditions. Many factors such as soil texture, moisture, temperature and the extent to which the herbicide spray covers the weeds will affect the results obtained. These estimates are derived from research and experience. This information may help you develop the most effective control program for the weeds on your farm.

Herbicides	Seedling Johnsongrass	Rhizome Johnsongrass	Itchgrass	Bermudagrass	Browntop Panicum	Annual Grasses	Morningglory	Winter Grasses	Winter Broadleaf Weeds	Other Broadleaf Weeds
Fallow Fields										
Roundup	E	G	G-E	F	E	E	F	—	—	G
Dalapon	F	P	F	G	E	G	P	—	—	P
Atrazine	P	P	P	P	P	G-E	G	—	—	G
Sencor/Lexone	G	P	P	P	F	G-E	G	—	—	G
Planted Fields										
Preemergence										
Sinbar	G-E	P	P	P	P	E	G-E	G	E	G-E
Sencor/Lexone	G-E	P	P	P	F-G	E	G-E	G	E	E
Treflan	E	P	G-E	P	G-E	E	P	G	P	P
Atrazine*	P	P	P	P	P	G-E	E	G	E	E
TCA	F	P	P	P	—	F	G	F	F	G
Velpar	F-G	P	P	P	P-F	G	G	G	G	G
Postemergence										
2, 4-D	P	P	P	P	P	P	G-E	P	G	G
Banvel	P	P	P	P	P	P	G-E	P	G-E	G-E
Weedmaster	P	P	P	P	P	P	E	P	E	E
Evik	P-F	P	F-G	P	G	G	F-G	F-G	G	G
Atrazine	P	P	P	P	P	P-F	F	F	G	F-G
Asulox	G	G	P-F	P	G	G	P	F-G	P	P
Dalapon	F	P	P	F	F-G	G	P	F	P	P

Control Rating Scale

Poor — less than 49%; Fair — 50-69%; Good — 70-90%; Excellent — 90-100%; — does not apply or not rated.

* Includes Karmex, Cotoran, Princep

Commercial Members of the
AMERICAN SUGAR CANE LEAGUE
OF THE U.S.A., INC.

ASSUMPTION BANK & TRUST CO.
P.O. Box 398 Napoleonville, LA 70390

THE CROPMATE COMPANY
Fertilizer Region
P.O. Box 28 Thibodaux, LA 70302

CAMECO INDUSTRIES, INC.
P.O. Box 968 Thibodaux, LA 70301

FIRST COMMERCIAL BANK
521 Main St. Franklin, LA 70538

DUPLANTIER, HRAPMANN,
HOGAN, & MAHER
Certified Public Accountants
821 Gravier Suite 1300
New Orleans, Louisiana 70112

ESTES REFRACTORY
P.O. Box 94 Jeanerette, LA 70544

THE FIRST NATIONAL BANK
IN DONALDSONVILLE
P.O. BOX 108 Donaldsonville, LA 70346

F. C. SCHAFFER & ASSOCIATES, INC.
1020 Florida Blvd.
Baton Rouge, LA 70802

GULF ENGINEERS & CONSULTANTS, INC.
535 Main Street
Baton Rouge, LA 70802

WESTWAY TRADING CORP.
228 St. Charles Ave., Suite 700
New Orleans, LA 70130

NADLER, INC.
P.O. Box 359
Plaquemine, LA 70765

NATIONAL BANK
FOR COOPERATIVES
Jackson Region
1800E, County Line Road
P.O. Box 16099
Jackson, MS 39236

OUACHITA FERTILIZER
Route 7, Box 49-F
New Iberia, LA 70560

DRAVO LIME COMPANY
Pelican State Division
12797 Scenic Highway
Baton Rouge, LA 70807

SELF INSURANCE ADMINISTRATORS
P.O. Box 11509
New Iberia, LA 70562-1509
A Member Company of Huval Insurance Group

FIRST SOUTH PCA
P.O. Box 667 Thibodaux, LA 70302
P.O. Box 10908 New Iberia, LA 70562

STANDARD SUPPLY & HARDWARE
CO., INC.
P.O. Box 60620 New Orleans, LA 70160

ST. MARY BANK & TRUST CO.
Franklin, LA 70538

LOUISIANA CANE MFG., INC.
P.O. Box 71 Thibodaux, LA 70301

WHITNEY NATIONAL BANK
228 St. Charles Avenue
New Orleans, LA 70130

RAYNE STATE BANK
AND TRUST COMPANY
P.O. Box 99
Duson, LA. 70529

3-D CHEMICAL, INC.
P.O. Box 607
St. Martinville, LA. 70582

J.I. CASE
P.O. Box 171818
Memphis, TN 38187-1818

e Sugar Bulletin
6 E. Bayou Rd.
bodaux, La. 70301

BULK RATE
U.S. POSTAGE
PAID
PERMIT NO. 43
Thibodaux, La.

SERIALS DEPT.
LOUISIANA STATE UNIV.
LIBRARY
BATON ROUGE LA 70803

The Sugar Bulletin

OFFICIAL BULLETIN OF THE AMERICAN SUGAR CANE LEAGUE OF THE U.S.A.

In This Issue

Up Front With The League by P. J. deGravelles, Jr. 4
Washington Update With Don Wallace 5
Farm Notes by Dr. Charley Richard 6
The Baton Rouge Line by Tom and Linda Spradley 9
In The Factory by Stephen J. Clarke 10
Past Presidents of the American Sugar Cane League 11

We stand for the encouragement of Home Industries as against Foreign Competition

Vol. 69 — No. 8 MAY 1, 1991

The Sugar Bulletin

The Official Organ of the American Sugar Cane League of the U.S.A., Inc.

P. J. deGravelles, Jr., Editor and General Manager
Charles A. Richard, Ph.D., Director of Research and Field Representative
Windell R. Jackson, Senior Agronomist
Herman Waguespack, Jr., Agronomist
John Constant, Business Manager
Nannette B. Nickens, Office Secretary
Paul G. Borron, III, Legal Counsel

Washington Representative:
Wallace and Edwards, Inc.
1150 Connecticut Avenue, N.W.
Suite 507
Washington, D.C. 20036
Phone: (202) 331-4331

Baton Rouge Representative:
Spradley and Spradley
6216 Riverbend Boulevard
Baton Rouge, LA 70820
Phone: (504) 766-1359

Editorial and Executive Office:
206 E. Bayou Rd., Thibodaux, LA. 70301
Phone: (504) 448-3707

OFFICERS AND MEMBERS OF THE BOARD OF DIRECTORS OF THE AMERICAN SUGAR CANE LEAGUE

Daniel Viator, Ph.D, Youngsville, LA
President

Branan Beyt, Jeanerette, LA
1st Vice-President

P. J. "Pete" deGravelles, Franklin, LA
Vice President — General Manager

Don Wallace, Washington, DC
Vice President — Government Relations

Patrick Cancienne, Belle Rose, LA
Treasurer

Irving Legendre, Jr., Thibodaux, LA
Secretary

Manuel Acosta, Raceland, LA
Bryan Allain, Jeanerette, LA
J. G. Beaud, Jr., New Roads, LA
Ramon E. Billeaud, New Orleans, LA
Felix Blanchard, New Iberia, LA
Ronald Blanchard, Napoleonville, LA
Neal Bolton, St. James, LA
Lawrence Dugas, New Iberia, LA
Dan Duplantis, Raceland, LA
John F. Gay, Plaquemine, LA
Ronald Gonsoulin, New Iberia, LA
Mike Graugnard, Edgard, LA
Warren Harang, III, Donaldsonville, LA
Roddy Hulett, St. Martinville, LA
Bobby Judice, Franklin, LA
Roger Kahao, Port Allen, LA
Denis Lanaux, Killona, LA
Melvin Landry, New Iberia, LA
A. J. LeBourgeois, Baldwin, LA
D. C. Mattingly, Paincourtville, LA
Jerry McKee, Thibodaux, LA
William S. Patout III, Jeanerette, LA
Kenneth Peltier, Thibodaux, LA
Stanley Pipes, Franklin, LA
R. L. Roane, Jeanerette, LA
Howard Robichaux, Labadieville, LA
Raphael Rodriguez, Franklin, LA
Mel Schudmak, White Castle, LA
Frank Sotile, Donaldsonville, LA
David Stewart, Lakeland, LA
Roland Talbot, Thibodaux, LA
Jackie Theriot, Breaux Bridge, LA
Charles Thibaut, Donaldsonville, LA
Glenn Timmons, Brusly, LA
Carlton Townsend, Bunkie, LA
Eugene Woods, Paincourtville, LA

LaColl
SB
215
S89

After three years, nothing matches the MAGNUM warranty.

Five years or 5,000 hours. That's the coverage you get—at no extra charge—on every new MAGNUM™ tractor. In fact, it's the same warranty* that covers every MAGNUM tractor ever built.

And, while the competition offers an occasional free warranty, they haven't put it on every tractor. Besides, only MAGNUM's 5-year/5000-hour warranty can be fully transferred without a fee. That gives the MAGNUM tractor's already high resale value another boost. And it gives you another good reason to buy.

See us today about an on-farm demonstration. Once you work one, you'll understand why MAGNUM means more than ever.

*Excluding tires, which are covered by their own manufacturers' warranties. A $200 deductible applies to each repair after the first year.

© 1991 J I Case

See These Case IH Dealers

Switzer Sales and Service
Jeanerette, LA
(318) 276-6384

Gremillion's, Inc.
New Roads, LA
(504) 638-6347

Lanier Int'l. Inc.
Abbeville, LA
(318) 893-1988

Lemann's Farm Supply Inc.
Baton Rouge, LA
(504) 357-6453

Thibodaux, LA
(504) 447-3776

Donaldsonville, LA
(504) 473-7927

case IH

UP FRONT WITH THE LEAGUE

By P. J. deGravelles, Jr.

"WHAT A DIFFERENCE A YEAR MAKES"

In the spring of 1990, a cloud of "doom and gloom" was hanging over the Louisiana sugar industry. There was certainly justification for such an attitude because the industry was still reeling from the devastating freeze of December, 1989. An excessive amount of rainfall blanketed south Louisiana during January, February, and March, 1990. The abnormal rainfall added "insult to injury" to a crop already hurt by single digit temperatures. Stands were weak and in some fields non-existent. About 90,000 acres of sugarcane had to be destroyed, thus adding to the physical and financial burden of replanting almost twice the normal complement of sugarcane. The processors were faced with the prospects of crushing a reduced crop, therefore resulting in a very short grinding season. To their credit, the growers and processors of Louisiana buckled down, faced up to the task and proceeded forward always looking toward crop year 1991.

Nature smiled favorably upon the Louisiana sugar industry in the early fall of 1990 with near perfect weather for the fall sugarcane planting season, resulting in almost 200,000 acres of sugarcane being planted.

The "doom and gloom" attitude of early spring, 1990 has made a 180 degree turn and in the spring of 1991 there is extreme optimism throughout the industry. Following a relatively mild winter, the stands of plant cane and the recurring ratoons are excellent. The pessimism of 1990 has succumbed to the optimism of 1991. The sun is shining bright over the Louisiana sugar industry and a positive attitude is the order of the day.

I would like to congratulate the Louisiana sugarcane growers and processors for their fortitude during the trying days of 1990. This strengthens my confidence that the Louisiana sugar industry can compete with any sugar producers.

For efficiency & Accuracy in Precision grading Consider the purchase of a

Lazerplane
by
Spectra-Physics

- Shorten your completion time
- reduce manhours per project
- easy to operate
- Eliminates costly overcutting

contact

ALLEE, ALLEE & ALLEN, Agent
P.O. BOX 108
ST. JAMES, LA 70086
504/265-3965

WASHINGTON UPDATE WITH DON WALLACE

RAVNHOLT NAMED "SUGAR MAN OF THE YEAR"

Eiler C. Ravnholt received the thirty-third annual Dyer Memorial Award as "Sugar Man of the Year — 1990" last month in New York. The award is presented each year to an individual for "significant and meritorious service" to the sugar industry. Ravnholt recently retired as Vice-President and Washington Representative of the Hawaiian Sugar Planters Association and formerly served as administrative assistant to Senator Daniel K. Inouye, D-Hawaii.

GATT NEGOTIATIONS RECONVENE APRIL 15

Discussions covering a wide range of technical issues are expected to reconvene April 15 in Geneva. As previously reported, the technical working group headed by GATT Director-General Arthur Dunkel met March 11-15 to review technical matters related to domestic programs. Discussions primarily focused on identifying so-called green light permitted policies. Green-yellow-red identity was used in earlier discussions to identify those policies which are permitted and policies which must be phased out. Talks will continue to focus on technical issues until Congress acts on a request to extend fast-track negotiating authority. Resolutions of disapproval were introduced in the Senate by Senator Ernest Hollings (D-SC) and in the House by Representative Byron Dorgan (D-ND). The fast-track provision allows the negotiation of trade agreements which must be approved or disapproved by Congress without amendment. Extension, which is automatic unless a resolution of disapproval is passed by the House or Senate, would keep fast-track effective until June 1, 1993. Fast-track also applies to the North American Free Trade Agreement. Negotiations with Mexico are expected to accelerate in mid-June if fast-track is extended. Meanwhile, numerous members of Congress have called for inclusion of "social" issues such as environmental concerns, child labor laws, labor standards, drug interdiciton and others.

GATT CRITICIZED IN HARVARD BUSINESS REVIEW

The April-March issue of the Harvard Business Review states that "The Uruguay Round, conceived in 1986 as a last, desperate effort at revitalization was, in fact, stillborn." The article goes on to say that the "GATT's 1940's-era assumptions and principles have become largely irrelevant to the world economy of the 1990's — and to America's interests in that economy." The article points out three major flaws in GATT supporters' logic: (1) failure to acknowledge that the global economic preeminence of the U.S. has largely faded, (2) failure to discern nations' understandable insistence on putting their own economic and social priorities ahead of "international vision," and (3) principles underpinning GATT, such as "national treatment" and "most favored nation," are inherently disadvantageous to most liberal and open societies. The authors, asserting that "GATT is typified by unenforceable rules applied to ungovernable areas of economic competition," point to the failure of the Tokyo Round to deliver on lavish reassurances as "the beginning of GATT death throes." Frustration with "spotty, slow and leaky" rules caused one country after another to sidestep GATT rules by a variety of mechanisms. The article also observes that one of GATTists'

(Continued on page 12)

FARM NOTES By Dr. Charley Richard

CROP REPORT — MEXICAN RICE BORER — NICHOLLS SUGAR SHORT COURSES

As of this writing on April 15, most of the cane acreage in the state has not suffered any serious damaging effects from cold weather. Many fields already have an adequate population for a good crop while others at least have an adequate number of good eyes to produce a good population. Extensive rains have fallen within the last week and will slow down the fertilizer applications that are currently under way. It is estimated that the majority of the acres in the state have already received their fertilizer application. Growers should now concentrate on good weed control to hopefully achieve maximum yields from the crop.

MEXICAN RICE BORER

It has been reported that one Mexican Rice Borer moth was found last year near Beaumont, Texas. This borer causes extensive damage to the Texas cane industry and it is of concern that it may cause damage to the Louisiana cane crop over what the borer that we already have causes. Whether it will survive here and the level of damage it might cause are totally unknown answers at this time. The longer that it can be kept away from our crop the better off we will be. This author along with Windell Jackson attended a meeting in the Texas industry to discuss numerous factors concerning its effects and control. The League is encouraging scientists here in Louisiana to set up traps to determine if it is currently present within the industry and to continually look for the insect so that we might control it before it gets a firm foothold in the cane belt. This insect is one reason why we have always discouraged the movement of cane from Texas to Louisiana. All areas that produce cane outside of Louisiana have diseases and insects that we currently do not have. It is very important that we do not bring additional problems upon ourselves. Eventually the Mexican Rice Borer may arrive here on its own, but it makes no sense to hasten its arrival by foolishly bringing it here through the importation of cane from the Texas industry. The goal of setting up traps within our industry will allow scientists here to determine its presence. Should it arrive, a plan will be implemented to hopefully minimize its impact.

NICHOLLS SUGAR SHORT COURSES

This summer there will be three short courses dealing with sugar and sugarcane conducted at Nicholls State University. This year will be the first Sugar Cane Production Institute and will be held June 17 through 27, 1991. The objectives of this program are: to acquaint the participant with the production and management practices of the sugarcane industry; to provide background knowledge so that participants will be better prepared to assume positions of responsibility and leadership; and, to develop in participants an appreciation of the problems and possible solutions of the industry. Topics will include: overview of sweeteners and U.S. sugarcane industry; government programs and regulations; history, botany, physiology, new technologies; variety development programs; drainage and irrigation;

(Continued on page 7)

FARM NOTES *(Continued from page 6)*

cultural practices such as land leveling, seedbed preparation, planting and cultivation; fertilization practices including soil testing, liming, recommendations and application; weeds and their control; insects and their control; diseases and their control; harvesting philosophy including ripeners, topping, cane sampling, dextran, method of payment; harvesting methods including harvesters, pilers, loaders, etc.; record keeping and statistical analysis; environmental concerns and regulations; problem solving and course evaluation. The cost of the institute is $875 per person which includes room, board and all workshop materials. Additional information and registration material can be obtained from the Institute's Director, Dr. Robert Falgout at Nicholls State University. He can be reached by telephone at (504) 448-4870 or by writing to the Department of Agriculture, Nicholls State University, P.O. Box 2013, Thibodaux, Louisiana 70310.

The other two courses will be the Raw Cane Sugar Manufacturers' Institute held May 27 through June 6, 1991 and the Cane Sugar Refiners' Institute held July 7 through 19, 1991. Both of these Institutes have been held in past years and have been very successful. As with the Sugar Cane Production Institute, additional information can be obtained from Dr. Falgout at Nicholls State University. These classes have always included numerous students from areas outside of Louisiana. The opportunity to exchange ideas and learn what others are doing has been good for the participants of these programs. It is expected that the same will be true for the Sugar Cane Production Institute.

GOODYEAR

SPECIAL
SURE-GRIP TD-8

GOODYEAR TIRES FOR YOUR CAR, TRUCK, FARM OR OFF HWY. EQUIPMENT

- 24 HR. ROAD SERVICE
- COMPLETE AUTOMOTIVE CERTIFIED SERVICE
- TRUCK TIRE BALANCE AND ALIGNMENT

NOBODY FITS YOU LIKE GOODYEAR

SUPER TRACTION • SUPER STRENGTH

7:30 AM - 6:00 PM MON. - FRI.
7:30 AM - 1:00 PM SAT
1203 ST. PATRICK HWY
THIBODAUX

GENERAL ELECTRIC
AUTHORIZED DEALER

PIT STOP
YOUR ON FARM SERVICE SPECIALIST

GOODYEAR AUTO SERVICE CENTER
1-800-256-1269 (504) 447-2696

Press Release

For 165 years, the Patout Family has farmed property in and around what is now Enterprise Sugar Mill and Plantation. For as many years the family has collected and preserved hand tools, implements, tractors and an assortment of various sugar related paraphernalia. But by far the prize is the five narrow gauged steam engines built for and used on the plantations' fields and mill.

Two of the engines are currently leased to "Six Flags Over Texas." They are known as the Mirabeau B. Lamar, an 0-4-0 full tender and the General Sam Houston, an 0-4-4T tender. The Stephanie, an 0-6-2T resides in Mississippi and has been restored by Mr. Winston George. The Bessie, an 0-4-0T is in storage and awaiting repair in a warehouse at Enterprise.

The Ida P., an 0-4-0T and tender was originally built for display by the Porter Locomotive Works and sold to Enterprise in 1912. The engine has been fully restored and is on display near the company office in Patoutville.

Through recent acquisition from the Southern Pacific Railroad, the depot originally located in Baldwin, Louisiana has been relocated directly onto property adjacent to the Hwy. 90 service road. This is the beginning of a rural museum dedicated to early sugar plantation life and the steam railroads that played such an important role in the expansion of the sugar industry.

The Isle Piquant Sugar Foundation is now being formed as a non-profit foundation. Being literally on ground level with the project and ideas, comments, thoughts towards this project are welcome. Bits of history, family stories, literature from sugar, sugar related industries, railroad and tourism information are all greatly needed. We are gathering information concerning resources of used narrow gauged rail, an old "restorable" steam engine (or two), old sugar making tools, ladles, kettles, hogsheads, old black and white photos or news clippings of early plantations from within Louisiana. We wish to reconstruct the period from 1870 to approx. the 1900's.

Please send inquiries to:

The Isle Piquant Sugar Foundation
Rt. 1, Box 288
Jeanerette, LA 70544

(318) 276-4592

to the attention of Julana Senette or Tommy Duhe.

The Isle Piquant Sugar Foundation is a non-profit organization dedicated to preserving the history of rural life on early Louisiana sugar plantations and the steam locomotives used upon them while promoting a better understanding of the Louisiana sugar industry, past and present, through education.

The Baton Rouge Line

By Tom and Linda Spradley

With two special sessions completed, the Legislature convened for its regular session on April 15. The regular session must end no later than midnight, July 8, but there is a lot of talk around the Capital about adjourning the session a couple of weeks early. There are several reasons for this but the primary motivation is to not spend more money than necessary for the session, since the Legislature spent two weeks in special session. Additionally, this being an election year, legislators are eager to get back home and begin campaigning.

During the first special session, the Legislature passed a couple of military relief bills, oil spill legislation, and, of course, the three cent sales tax. Passage of this "temporary" suspension of the sales tax on food and utilities prior to the session will enable the legislature to have a better idea of how much money is available to spend, hopefully making the budget process less uncertain. In past years, it was sometimes difficult to put together a budget because it wasn't until the last few days of the session until it was known how much money would be available.

In the second special session, the Legislature reapportioned legislative districts, leaving the reapportionment of the BESE districts to die on the calendar. At best, this was a difficult process and, as expected, there are those who are not happy with the results. It is expected that the Governor will not veto any of the plans, however, thus leaving it to the U.S. Justice Department to determine the validity of the plans.

Close to 800 bills have been filed by the House and Senate for the regular session thus far but, traditionally, the number of bills filed is less in an election year than in other years. Additionally, there generally are fewer controversial issues.

This session, the abortion issue will once again garner headlines but there are forces at work attempting to resolve that matter early on in the session so the Legislature will be able to concentrate on other matters. Also expected are several environmental issues and, of course, a big fight over the teacher evaluation program.

In our next column, after all of the bills have been filed, we will focus on issues of particular concern to the sugar industry, and include information on how you can participate in the legislative process, if you desire to do so.

IN THE FACTORY

MORE PAPERS FROM THE ISSCT PROCEEDINGS

Stephen J. Clarke
Audubon Sugar Institute
Louisiana Agricultural Experiment Station

I am not sure what you expect from this month's article since in the previous one there was promise of some comment on "the problem of entertainment". While I do have some difficulties with what now passes for entertainment, as most of you probably guessed the subject is entrainment. However, I have just returned from the XXIV Conference of the West Indies Sugar Technologists in Jamaica and entertainment may have been on my mind but it was not in the original text.

In continuing attempts to improve both energy and process efficiency, heaters and evaporators have been the subject of a wide range of studies. There are four papers on these subjects in the recently published ISSCT proceedings. Three deal with different approaches to these operations and one is a review of some of the currently used types of entrainment separators.

Two papers deal with methods for juice heating, one with a new plate heater design and the other with the steam balance changes that occur when going over to direct contact juice heaters. Different designs of juice heaters involving heat exchanges have different heat and hydraulic efficiencies as well as different costs. Several new designs have been developed and each has its specialized advantages. The conventional horizontal multiple pass systems have low cost, simplicity of construction, relatively high heat transmission and low hydraulic pressure drop characteristics. Spiral designs have similar heat transfer characteristics and have been reported to run longer without cleaning. A familiar type of heat exchanger used with syrups and in refineries is the plate type. In general, plate designs offer very good heat transfer, acceptable pressure drops and can be readily cleaned. However, early testing of this type with mixed juice indicated high initial heat transfer but that they could not operate for more than a few hours due to blockage by bagasse particles, etc. To cope with this, a new plate design which has a wider juice passage and also a special operational procedure have been tested. The results confirmed that this design provides more efficient heat transfer than do other designs, which means that a smaller heating surface is needed. However the hydraulic pressure drop is greater when compared with tube and shell designs. The pressure drop remained constant for the first day or so but the pressure then increased due to deposition. A backflush system was therefore used, reversing the flow of juice through the heater every four hours. The heater could only be operated for 48 hours without stopping.

The juice heating system with the highest heat transfer is by direct contact, in which the juice is pumped into a vessel pressurized with steam. No fouling of heat transfer surfaces can occur but there is the problem of dilution of the juice and re-evaporation of the condensed steam. An analysis of the steam

(Continued on page 14)

PRESIDENTS OF THE AMERICAN SUGAR CANE LEAGUE

1.	A. H. Gay	October 1922 - September 1924
2.	E. A. Burguieres	October 1924 - September 1925
3.	S. C. Munson	October 1925 - September 1927
4.	D. W. Pipes, Jr.	October 1927 - September 1929
5.	C. D. Kemper	October 1929 - September 1931
6.	Percy A. Lemann	October 1931 - September 1933
7.	R. H. Chadwick	October 1933 - September 1935
8.	R. L. Baker	October 1935 - September 1937
9.	Edward J. Gay	October 1937 - September 1939
10.	W. F. Giles	October 1939 - September 1941
11.	W. C. Kemper	October 1941 - September 1943
12.	J. J. Shaffer, Jr.	October 1943 - September 1945
13.	George L. Billeaud	October 1945 - September 1947
14.	M. J. Foster	October 1947 - September 1949
15.	J. J. Munsonn	October 1949 - September 1951
16.	L. A. Borne	October 1951 - September 1953
17.	J. P. Duhe	October 1953 - September 1955
18.	F. A. Graugnard, Jr.	October 1955 - September 1957
19.	Bronier Thibaut	October 1957 - September 1959
20.	Warren Harang, Jr.	October 1959 - September 1961
21.	T. M. Barker	October 1961 - September 1963
22.	Andrew P. Gay	October 1963 - September 1965
23.	William S. Chadwick	October 1965 - September 1967
24.	J. Malcolm Duhe	October 1967 - September 1969
25.	Thomas H. Allen	October 1969 - September 1971
26.	James Thibaut	October 1971 - September 1973
27.	Charles Savoie	October 1973 - September 1975
28.	Edward Supple	October 1975 - September 1977
29.	P. J. deGravelles, Jr.	October 1977 - September 1979
30.	Ramon E. Billeaud	October 1979 - September 1981
31.	Kenneth H. Kahao	October 1981 - September 1983
32.	John Thibaut	October 1983 - September 1985
33.	Irving E. Legendre, Jr.	October 1985 - September 1987
34.	Fred Y. Clark	October 1987 - February 1989
35.	William S. Patout, III	February 1989 - February 1991
36.	Daniel P. Viator	February 1991

WASHINGTON UPDATE

(Continued from page 5)

"proofs" that U.S. manufacturing is not worth defending is manufacturers' demands for trade relief, not seeing how "this demand is actually the product of GATTism's self-fulfilling prophecy . . ." The article concludes that the failure of GATT would not result in terrible economic plagues predicted by some and notes that much of trade expansion after World War II was in sectors outside GATT's jurisdiction (notably services and agriculture) or sectors that departed from GATT's discipline, as with textiles.

HEARINGS HELD ON FAST-TRACK

The Chairman of the House Ways and Means Committee, Dan Rostenkowski, held a continuation of the hearing to consider the request of the President submitted to the Congress on March 1, 1991, for an extension of so-called fast-track procedures. The hearing was held Thursday, April 11, 1991 and was a continuation of the hearing held on March 12, 1991 at which U.S. Trade Representative, the Honorable Carla A. Hills, testified on behalf of the Administration.

Testimony was received on April 11 from Richard A. Gephardt, Majority Leader, U.S. House of Representatives and from witnesses invited from the private sector including representatives from the AFL-CIO, the UAW, The Business Roundtable, the National Association of Manufacturers, the U.S. Chamber of Commerce, and the Emergency Committee for American Trade.

A hearing on GATT was also tentatively scheduled by Senate Finance Committee Chairman Lloyd Bentsen for April 17.

PROSPECTIVE SUGARBEET PLANTINGS

The U.S. Department of Agriculture released its 1991 prospective plantings on March 28. Growers expect to plant 1.40 million acres of sugarbeets in 14 states in 1991. If intentions are realized, planted acreage will be down slightly from a year earlier, but 6 percent more than two years ago. Intentions by state are as follows:

(See sugarbeet table on page 13)

CANE TRACTOR PARTS

We ship & locate parts nationwide.

New, Used and Rebuilt Hi Crop and Row Crop Tractor Parts, Tires, Rebuilt Clutches, Crank Shafts, Injector Pumps and More. Also Any Hard-To-Find Parts. We Buy Farm Equipment & Salvage Tractors.

SAVE 50% & More!

CANE TRACTOR PARTS

Toll Free 1-800-738-2263

(318) 276-3453 (318) 276-6230

Hwy. 90

Jeanerette, LA

WASHINGTON UPDATE *(Continued from page 12)*

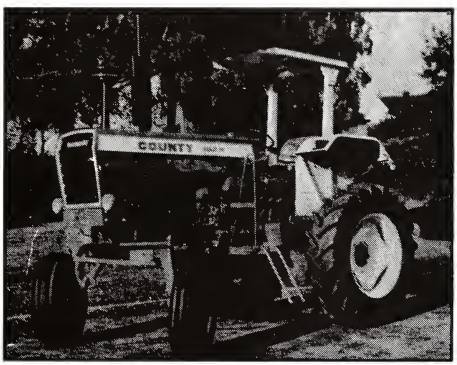
SUGARBEETS 1/

STATE	AREA PLANTED			
	1989	1990	IND 1991	1991/1990
		1,000 ACRES		PERCENT
CA	176.0	173.0	150.0	87
CO	40.6	40.8	40.6	100
ID	179.0	188.0	192.0	102
MI	154.0	160.0	164.0	103
MN	342.0	368.0	370.0	101
MT	52.7	55.2	57.0	103
NE	70.1	75.1	81.0	108
ND	180.2	193.9	195.0	101
OH	13.6	20.0	20.0	100
OR	15.9	17.2	19.0	110
TX	36.6	41.9	41.0	98
WY	61.8	65.0	68.0	105
OTHER 2/	1.9	2.3	2.0	87
U S	1,324.4	1,400.4	1,399.6	99.9

1/ RELATES TO YEAR OF INTENDED HARVEST EXCEPT FOR OVERWINTERED SPRING PLANTED BEETS IN CA. 2/ INCLUDES NM AND WA.

MODEL 1162-H FORD COUNTY

HIGH CLEARANCE
6 CYLINDER DIESEL ENGINE
127 HORSE POWER
11.00 X 16 FRONT TIRES
20.8 X 16 R.I. REAR TIRES
9600 LB LIFT CAPACITY
DELUXE SEAT • ROLL BAR
35[M] CROP CLEARANCE
GEAR TYPE DROP HOUSINGS



PRICED TO SELL
OUT OF TOWN CALL TOLL FREE

1-800-969-0068

M & L INDUSTRIES INC.

1210 ST. CHARLES ST.
HOUMA, LA 70360
PHONE (504) 876-2280

(Continued from page 10)

balance of a factory in which direct contact juice heating is employed concludes that, with the appropriate equipment, a satisfactory balance can be achieved without any increase in fuel consumption. Raw sugar factories without ancillary steam requirements are best suited to the use of direct contact heaters. The advantages claimed are the elimination of cleaning, less pumping capacity and no replacement of tubes.

Data from a number of Louisiana mills indicate that the loss of sugar due to evaporator entrainment, especially in the last body, is a major cause of sugar loss and also an environmental problem if this water is disposed of in public waterways. In a review of entrainment separators used in Australian factories, Wright describes the types currently in use and outlines the mechanisms by which they operate and some calculations that can be used for vapor velocities and pressure drops. In multiple effect evaporators the vapor velocity in the last effect is much higher than in the earlier effects and the tendency for entrained droplets to be carried over is much more severe. Previous data showed that entrainment becomes much more severe when the vapor velocity in the final effect exceeds about 20 ft/sec. The ability of a particular design of entrainment separator to cope is limited by the vapor velocity. Operational efficiency and pressure loss vary with design and the characteristics of a range of designs are given. There is limited experimental information about pressure drop and maximum operating velocity, but there seem to be reasonable

(Continued on page 15)

Introducing Ultra-Command ™ Powershift:

MODEL 8830 FORD TRACTOR

ULTRA-COMMAND POWERSHIFT
170 P.T.O. HORSEPOWER
FRONT WHEEL ASSIST
16.9 X 28 R1 Front Tires
20.8 X 38 R1 REAR TIRES
22½ INCHES CROP CLEARANCE
WHISPER QUIET CAB
3 YEAR WARRANTY • NO DEDUCTIBLE

There's never been a powershift like this!

Call or Stop In Today **1-800-969-0068**

M & L INDUSTRIES INC.

1210 ST. CHARLES ST.
HOUMA, LA 70360
PHONE (504) 876-2280

predictions as long as the unit is not heavily fouled. The importance of correct installation in relation to the vapor stream and drainage of the trapped liquid is stressed.

A non-conventional pre-evaporator on trial in Brazil is described in which mixed juice at high temperature (250°F) passes from a pressurized tank into the evaporator in which it is flashed as a "descending turbulent mist". The system is called Thermally Accelerated Short Time Evaporator (TASTE). It is used for concentrating untreated mixed juice before fermentation but is unsuitable in this mode for sugar production due to the excessive inversion that would take place. Better thermal efficiency and easier cleaning is claimed but there is no discussion of sugar losses.

Another factor in evaporation that has been discussed previously in this column is the loss of sucrose to invert due to high temperatures in early effects. Sugar losses due to this and to entrainment are avoidable and this is possible along with thermal efficiency if proper conditions are chosen and the evaporators operated with care.

CLASSIFIED

TRACTORS FOR SALE: JD Hi-Clearance 4230, 4020, 4010, 2 — 3020; JD 4430 PS; IH 1066; Low-Clearance 1086; Land Level 40 ft.; JD 3-Row Chopper; JD 1630 16 ft. disk; Amico hipper 6 row; 6 shank V-ripper. Call Grady Dugas, St. Martinville (Parks), La. (318) 845-4774.

FOR SALE: 4 Drum type Mechanical Planters $4,500 - $5,500. Call Comb Farms (318) 332-1970 (day) (318) 845-4287 (night).

FOR SALE: 1965 PNH Excavator Model H312 4-53 Detroit engine 1¼ yd. & 8 ft. clean out buckets. Transloader ready. Grab not included $10,000. Call (504) 369-2265 (day) (504) 369-6645 (night).

FOR SALE: 2 Transfer Carts — $2,500 each. Call Danny Viator at Triple V Farm (318) 856-5609 or (318) 856-7948.

FOR SALE: IH 1066 Tractor, 41' Rayne Plane Land Leveler, JD 1630 Disc Harrow (17 ft.). 3 — Tractor Mounted Cane Loaders. 1 — Hydrostat. 2 — IH 6-row Do-alls, several sets of Discs. Call 1-800-738-2263.

WANTED: Tractors for Salvage, any make, age or condition, Running or Not. Also want to buy Hi-crop Tractors. Call 1-800-738-2263.

Commercial Members of the
AMERICAN SUGAR CANE LEAGUE
OF THE U.S.A., INC.

ASSUMPTION BANK & TRUST CO.
P.O. Box 398 Napoleonville, LA 70390

THE CROPMATE COMPANY
Fertilizer Region
P.O. Box 28 Thibodaux, LA 70302

CAMECO INDUSTRIES, INC.
P.O. Box 968 Thibodaux, LA 70301

FIRST COMMERCIAL BANK
521 Main St. Franklin, LA 70538

DUPLANTIER, HRAPMANN, HOGAN, & MAHER
Certified Public Accountants
821 Gravier Suite 1300
New Orleans, Louisiana 70112

ESTES REFRACTORY
P.O. Box 94 Jeanerette, LA 70544

THE FIRST NATIONAL BANK
IN DONALDSONVILLE
P.O. BOX 108 Donaldsonville, LA 70346

F. C. SCHÄFFER & ASSOCIATES, INC.
1020 Florida Blvd.
Baton Rouge, LA 70802

GULF ENGINEERS & CONSULTANTS, INC.
535 Main Street
Baton Rouge, LA 70802

WESTWAY TRADING CORP.
228 St. Charles Ave., Suite 700
New Orleans, LA 70130

NADLER, INC.
P.O. Box 359
Plaquemine, LA 70765

NATIONAL BANK
FOR COOPERATIVES
Jackson Region
1800E, County Line Road
P.O. Box 16099
Jackson, MS 39236

OUACHITA FERTILIZER
Route 7, Box 49-F
New Iberia, LA 70560

DRAVO LIME COMPANY
Pelican State Division
12797 Scenic Highway
Baton Rouge, LA 70807

SELF INSURANCE ADMINISTRATORS
P.O. Box 11509
New Iberia, LA 70562-1509
A Member Company of Huval Insurance Group

FIRST SOUTH PCA
P.O. Box 667 Thibodaux, LA 70302
P.O. Box 10908 New Iberia, LA 70562

STANDARD SUPPLY & HARDWARE CO., INC.
P.O. Box 60620 New Orleans, LA 70160

ST. MARY BANK & TRUST CO.
Franklin, LA 70538

LOUISIANA CANE MFG., INC.
P.O. Box 71 Thibodaux, LA 70301

WHITNEY NATIONAL BANK
228 St. Charles Avenue
New Orleans, LA 70130

RAYNE STATE BANK
AND TRUST COMPANY
P.O. Box 99
Duson, LA. 70529

3-D CHEMICAL, INC.
P.O. Box 607
St. Martinville, LA. 70582

J.I. CASE
P.O. Box 171818
Memphis, TN 38187-1818

Sugar Bulletin
E. Bayou Rd.
odaux, La. 70301

ress Correction Requested)

BULK RATE
U.S. POSTAGE
PAID
PERMIT NO. 43
Thibodaux, La.

SERIALS DEPT.
LOUISIANA STATE UNIV
LIBRARY
BATON ROUGE LA 70803

The Sugar Bulletin

FFICIAL BULLETIN OF THE AMERICAN SUGAR CANE LEAGUE OF THE U.S.A.

ANNOUNCING THE
ANNUAL CONTACT COMMITTEE MEETING
OF THE
AMERICAN SUGAR CANE LEAGUE
OF THE
USA, INC.
THURSDAY, JUNE 27, 1991
1:30 P.M.
RIENZI ROOM
HOWARD JOHNSON LODGE
201 N. CANAL BLVD.
THIBODAUX, LOUISIANA

We stand for the encouragement of Home Industries as against Foreign Competition

Vol. 69 — No. 9 JUNE 1, 1991

The Sugar Bulletin

The Official Organ of the American Sugar Cane League of the U.S.A., Inc.

P. J. deGravelles, Jr., Editor and General Manager
Charles A. Richard, Ph.D., Director of Research and Field Representative
Windell R. Jackson, Senior Agronomist
Herman Waguespack, Jr., Agronomist
John Constant, Business Manager
Nannette B. Nickens, Office Secretary
Paul G. Borron, III, Legal Counsel

Washington Representative:
Wallace and Edwards, Inc.
1150 Connecticut Avenue, N.W.
Suite 507
Washington, D.C. 20036
Phone: (202) 331-4331

Baton Rouge Representative:
Spradley and Spradley
6216 Riverbend Boulevard
Baton Rouge, LA 70820
Phone: (504) 766-1359

Editorial and Executive Office:
206 E. Bayou Rd., Thibodaux, LA. 70301
Phone: (504) 448-3707

OFFICERS AND MEMBERS OF THE BOARD OF DIRECTORS OF THE AMERICAN SUGAR CANE LEAGUE

Daniel Viator, Ph.D, Youngsville, LA
President

Branan Beyt, Jeanerette, LA
1st Vice-President

P. J. "Pete" deGravelles, Franklin, LA
Vice President — General Manager

Don Wallace, Washington, DC
Vice President — Government Relations

Patrick Cancienne, Belle Rose, LA
Treasurer

Irving Legendre, Jr., Thibodaux, LA
Secretary

Manuel Acosta, Raceland, LA
Bryan Allain, Jeanerette, LA
J. G. Beaud, Jr., New Roads, LA
Ramon E. Billeaud, New Orleans, LA
Felix Blanchard, New Iberia, LA
Ronald Blanchard, Napoleonville, LA
Neal Bolton, St. James, LA
Lawrence Dugas, New Iberia, LA
Dan Duplantis, Raceland, LA
John F. Gay, Plaquemine, LA
Ronald Gonsoulin, New Iberia, LA
Mike Graugnard, Edgard, LA
Warren Harang, III, Donaldsonville, LA
Roddy Hulett, St. Martinville, LA
Bobby Judice, Franklin, LA
Roger Kahao, Port Allen, LA
Denis Lanaux, Killona, LA
Melvin Landry, New Iberia, LA
A. J. LeBourgeois, Baldwin, LA
D. C. Mattingly, Paincourtville, LA
Jerry McKee, Thibodaux, LA
William S. Patout III, Jeanerette, LA
Kenneth Peltier, Thibodaux, LA
Stanley Pipes, Franklin, LA
R. L. Roane, Jeanerette, LA
Howard Robichaux, Labadieville, LA
Raphael Rodriguez, Franklin, LA
Mel Schudmak, White Castle, LA
Frank Sotile, Donaldsonville, LA
David Stewart, Lakeland, LA
Roland Talbot, Thibodaux, LA
Jackie Theriot, Breaux Bridge, LA
Charles Thibaut, Donaldsonville, LA
Glenn Timmons, Brusly, LA
Carlton Townsend, Bunkie, LA
Eugene Woods, Paincourtville, LA

Best Values in New Equipment

The only thing that lasts longer is the tractor it protects.

Every Case International MAXXUM tractor comes with an exclusive 5-year/5000-hour warranty.* The best protection in the business. What might be even more significant than the coverage, though, is what the warranty says about the tractor.

MAXXUM tractors are built to last. So you can feel confident buying any tractor in the line.

MAXXUM

In a class by itself.

Plus every tractor is powered by an efficient Case International diesel engine. You can choose a fully-synchronized or powershift transmission. And every tractor can be equipped with a luxury cab.

Stop at your Case IH dealer today to see the 5-year/5000-hour warranty, along with all the other durable parts on a MAXXUM tractor.

*Excluding tires, which are covered by their own manufacturers' warranties. A $200 deductible applies to each repair after the first year.

© 1991 J I Case

See These Case IH Dealers

Switzer Sales and Service
Jeanerette, LA
(318) 276-6384

Gremillion's, Inc.
New Roads, LA
(504) 638-6347

Lanier Int'l. Inc.
Abbeville, LA
(318) 893-1988

Lemann's Farm Supply Inc.
Baton Rouge, LA
(504) 357-6453

Thibodaux, LA
(504) 447-3776

Donaldsonville, LA
(504) 473-7927

case IH

UP FRONT WITH THE LEAGUE

By P. J. deGravelles, Jr.

"WHAT A DIFFERENCE A MONTH MAKES"

On April 5, 1991, I wrote my article for the May 1 edition of "The Sugar Bulletin." Coming off the poor 1990 sugarcane crop in Louisiana, the prospects for a bumper crop in 1991 were excellent. Therefore, I entitled my article "What a Difference a Year Makes."

Then the rain began. For fifteen of the next twenty-five days in April we recorded rainfall in Thibodaux. The monthly total was 15.44 inches. There was no let up in May with heavy rain fall on the first day of the month and continuing until the ninth day. As of the date of this writing (May 13), we have had 13.65 inches of rain in May, resulting in a total of 29.09 inches from April 7 to this date.

There is no doubt the crop has suffered. We are best served by a dry spring that promotes tillering in the crop. The April and early May period is usually the time frame during which most fertilizer is applied to the crop. That same time frame is also critical for the application of herbicides to control grass and weeds in the crop. Our best estimate today is that slightly over 50% of the sugarcane has been fertilized and a small amount of herbicides applied.

Two other areas causing a critical situation are standing water and flat rows. Regarding water standing in fields, the tides have been 3 to 4 feet above normal for several weeks. Excess rainfall cannot be pumped from low lying areas, and in many cases tidewater is backing into fields and completely covering the rows. There will be losses from this but the acreage and tonnage reduction has not been determined as of this date. The other problem, flat rows, can be remedied if the rains subside. We know we need a good row for sugarcane to withstand the summer rains and winds, to do a better job of harvesting and to assure a good stubble crop the following year.

The period between the middle of May and the middle of June will be critical to the Louisiana sugar industry. That time period will determine if we can produce an excellent crop, an average crop or a fair crop. My experience with the expertise and ability of our producers, given a half way decent chance, is that they will produce an excellent crop of sugarcane in 1991.

(See photos on page 5)

SUGAR
BULLETIN

CLASSIFIED ADS

GET

RESULTS

(Continued from page 4)

Fields of plant cane in Thibodaux destroyed by flooding.

A field of plant cane near Vacherie disappearing after several weeks of flooded conditions.

WASHINGTON UPDATE WITH DON WALLACE

HOUSE HOLDS HEARING ON FREE TRADE

On April 24, 1991, the House Agriculture Committee held a hearing to review the proposed U.S.-Mexico Free-Trade Agreement and the fast-track authority and how it would affect U.S. agriculture. Chairman de la Garza (D-TX) expressed his support for the concept of expanding trade with Mexico, which is currently the 4th largest market for U.S. agricultural products, but he warned that Congress must understand all implications and require negotiators to protect U.S. interests. Witnesses included Sen. Phil Gramm (R-TX) and Rep. Jim Kolbe (R-AZ), with both expressing strong support for the FTA. USDA Secretary Ed Madigan and Labor Secretary Lynn Martin, USTR Ambassador Carla Hills and EPA Assistant Administrator Linda Fisher all expressed support for FTA. They also told Ag. Committee members that U.S. agriculture would benefit and U.S. environmental and labor laws could be enforced. Representatives from both U.S. and Mexican agricultural interest groups aired a wide variety of views.

Testifying in opposition for the U.S. sugar industry was Jack Roney, vice president of the Hawaiian Sugar Planters' Association. In a separate hearing held by the Senate Finance Committee on April 17, American Farm Bureau Federation President Dean Kleckner testified in favor of Fast Track. According to Kleckner, the loss of Fast Track negotiating authority would mean lost trade opportunities for American agriculture. Kleckner also said that if the Uruguay Round fails, American agriculture will lose a major opportunity to open and develop export markets for future U.S. agricultural output, "output that is almost certain to outpace the domestic demand in the years to come." He went on to say that "we believe that American agriculture has a great deal to gain from a successful agreement and a great deal to lose from giving up on the effort at this time."

Congress has until May 31 to decide whether to extend the President's fast track negotiating authority for two more years. Under fast track, the administration could negotiate and Congress would have 60 to 90 days to consider it. Congress could only vote up or down on the pact; no amendments would be allowed.

SUGAR INDUSTRY REPRESENTATIVES VISIT WASHINGTON

During the week of April 29, over 70 sugar growers, processors and refiners from beet and cane states traveled to Washington to visit personally with Members of Congress to express their opposition to Fast Track. The group also met with USDA Secretary Ed Madigan to discuss the current quota situation. Don Wallace, Pete de Gravelles and Mike Graugnard represented the ASCL. Meetings were held with all members of the Louisiana Congressional Delegation to express the League's concern with fast-track procedures. Specifically, League representatives pointed out that a 30% cut in price supports would continue inequities that currently exist between the U.S. and E.C. because the E.C. subsidizes sugar production at 31 cents compared to the U.S. loan rate of 18 cents. Congressmen and Senators were urged to oppose fast-track in order to preserve their right to offer amendments to any agreement which might be negotiated in the GATT.

Meanwhile support for fast-track

(Continued on page 18)

FARM NOTES By Dr. Charley Richard

CROP PROSPECTS DIMINISHING BECAUSE OF THE RAIN — UPCOMING MEETINGS: CONTACT COMMITTEE, ASSCT, FIELD DAYS, ISSCT — KENAF — COGONGRASS FOUND IN THE CANE BELT

As of this writing on May 27, some 64.87 inches of rain have fallen on 64 days during the first five months of 1991 at the League Office in Thibodaux. The longest dry spell during this interval was only 10 days in duration. What started out as an optimistic view of the crop has now turned into an average outlook. Grass has overtaken a considerable acreage and the row configuration in many plant cane fields is very flat. This is not good for harvesting down cane nor for stubble protection this coming winter. An extra cultivation will have to be preformed now to sink the middles and in many cases this cultivation will break some cane shoots and will prune some roots at a date later than desirable for maximum growth. However, growers have little choice and must get the row contour such that they can harvest this crop should it fall.

The effects of the extensive rains are numerous and include direct losses as well as extra costs incurred in making this crop. Some losses will occur due to excessive water laying on the fields for a prolonged period of time. In fields which have been effected to a lesser degree by standing water losses in tillering will be seen. Not only is there a loss in tillering but also the primary shoots which have a jump on the tillers stay ahead and have a tendency to shade out the smaller shoots due to the prolonged, wet weather. During dry weather the reverse is normally true; more tillering and uniformity in height of all cane shoots to provide an even larger population.

In addition to the losses incurred are the extra costs of making this crop under the adverse conditions. The costs of pumping this excess water and refurbishing levees is astronomical and will continue to increase as long as back water flooding stays high and rainfall continues. Other extra costs will come from replacement fertilizer which may be needed and from the use of alternate fertilizer sources such as urea which will be more expensive to apply. Approximately half of the cane belt has already been fertilized. Also, there will be extra herbicide costs as a result of the lack of cultivation during the wet period and possibly even reduced yield from the extra weed pressure. Additionally, weed seeds which have accumulated on the ditchbanks, have probably dispersed throughout the entire flooded field adding to the costs of fighting weeds this year as well as in future years.

Although the prospects for the 1991 crop are not as bright as they were a month ago, this crop is far from a poor crop. Most growers have such a large percentage of plant cane that they should still do well. Some growers who have suffered worse than others from flood waters will be badly hurt and the industry stands to lose some growers who may have gotten hurt from natural disasters in two consecutive years. However, it is still felt that with the high percentage of plant cane, the industry as a whole, can make a respectable yield despite the adverse weather that has occurred up to this point.

UPCOMING MEETINGS: CONTACT COMMITTEE, ASSCT, FIELD DAYS, ISSCT

The annual Contact Committee Meeting of the American Sugar Cane

(Continued on page 16)

The Baton Rouge Line

By Tom and Linda Spradley

Thus far, this legislative session has been one of the busiest anyone can remember. The legislators seem to be serious about adjourning early (before July 8), and therefore seem to be scheduling more bills and working longer hours than is customary at this point in a regular session. Additionally, the deluge of bills that was filed at the filing deadline has further exacerbated the situation.

We have pinpointed approximately 200 bills that affect the sugar industry and are, of course, watching all of them closely. While there are some "bad" bills in this group there are many "good" bills.

Following are some of the more important bills that will impact sugar this session.

HB 208, HB 968, HB 1803 (Martin); HB 1885 (Travis) — While these bills deal with slightly different issues, they are all designed to assist the agriculture industry in environmental matters.

Additionally, there are many bills supported by several groups of a diverse nature that would delete some of the control that DEQ has over environmental matters.

HB 303 (Holden); SB 411 (Kelly) — Provides for solidary liability of those who cause injury in the storage, handling, or transportation of toxic or hazardous substances. This is the same bad bill that we were successful in stopping last year.

HB 853 (Ater) — Characterizes part-time, seasonal, and construction employees for the purpose of determining benefits for worker's compensation. There are several good worker's comp bills but this bill would be especially beneficial for sugar.

SB 17 (Bankston) — Provides for an assessment report of the economic impact of proposed legislation. This bill is important because fiscal notes would be prepared for the impact on business.

HB 505 (Ater); SB 169 (Hainkel) — Provides for the computation of damages and elements of proof in certain tort claims. These bills would eliminate strict liability in Louisiana.

If you are interested in discussing any bills with us, please call the office at 504-766-1359 and we will get back to you as soon as possible. If you would like to discuss a bill with a Representative, you can reach him/her at 504-342-2040.

In late April, Gov. Roemer issued an Executive Order which should assist the sugar industry with environmental problems. In essence, the order states that the Governor will appoint a liasion between DEQ and the agricultural industry. DEQ and the Chancellor of the LSU Agricultural Center will communicate their positions to this liasion, and DEQ cannot make or enforce any rule or regulation unless public hearings are held and the Governor, DEQ, and the Chancellor concur that the rule or regulation is justified.

Tell Them
You Saw It In
THE
SUGAR
BULLETIN

GOODYEAR

GOODYEAR TIRES FOR YOUR CAR, TRUCK, FARM OR OFF HWY. EQUIPMENT

- 24 HR. ROAD SERVICE
- COMPLETE AUTOMOTIVE CERTIFIED SERVICE
- TRUCK TIRE BALANCE AND ALIGNMENT

NOBODY FITS YOU LIKE GOODYEAR

SPECIAL SURE-GRIP TD-8

SUPER TRACTION • SUPER STRENGTH

GENERAL ELECTRIC AUTHORIZED DEALER

7:30 AM - 6:00 PM MON. - FRI.
7:30 AM - 1:00 PM SAT
1203 ST. PATRICK HWY
THIBODAUX

PIT STOP
YOUR ON FARM SERVICE SPECIALIST

GOODYEAR AUTO SERVICE CENTER

1-800-256-1269 (504) 447-2696

Introducing Ultra-Command ™ Powershift:

MODEL 8830 FORD TRACTOR

ULTRA-COMMAND POWERSHIFT
170 P.T.O. HORSEPOWER
FRONT WHEEL ASSIST
16.9 X 28 R1 Front Tires
20.8 X 38 R1 REAR TIRES
22½ INCHES CROP CLEARANCE
WHISPER QUIET CAB
3 YEAR WARRANTY • NO DEDUCTIBLE

There's never been a powershift like this!

Call or Stop In Today **1-800-969-0068**

M & L INDUSTRIES INC.

1210 ST. CHARLES ST.
HOUMA, LA 70360
PHONE (504) 876-2280

IN THE FACTORY

SUGARS IN CANDY MANUFACTURE

Stephen J. Clarke
Audubon Sugar Institute
Louisiana Agricultural Experiment Station

The last few months I have written about aspects of factory operation and next month I hope to be able to report on the technologists' meetings in South Africa. For a change this month, I thought that I would deal with one of the industries that requires sucrose as an essential raw material — the candy industry. This is prompted by reading a recent book entitled "Sugar Confectionary Manufacturer", edited by E.B. Jackson and published in England (hence the word confectionary rather than candy).

The sugar belt inevitably has many amateur producers of candy and there are many recipes in local cookery books for fudge and other products. Sucrose is of course the essential ingredient in these, as it is in all classical sweet candy manufacture. The whole candy industry has been built around the physicochemical properties of sucrose and their modification by other traditional sweeteners. These sweeteners are usually other carbohydrates and the distinction must be made between nutritive (caloric) sweeteners, such as sucrose and glucose, and artificial (low or non-caloric) sweeteners, such as aspartame. The latter are not discussed further and non-sugar candy strikes me in the same way as non-alcoholic beer — why bother?

The quality of the sucrose required for candy manufacture depends upon the type of candy being produced. Liquid sugar from the refining process may be used for some high quality products, but lower quality (higher color) sugars can be used for highly colored and flavored products. In some cases partial inversion of the sucrose is desirable to change the crystallization characteristics or to prevent crystallization at very high solids contents. The "mouthfeel" (a word I had not seen before) of the product can depend very much on the size and number of sucrose or glucose crystals in the candy. At high invert contents the glucose is likely to crystallize, solidifying the whole mass.

Crystallization is not the same as solidification. A hard solid may not have a crystalline structure — an example of this is glass which is technically a liquid (no regular crystalline structure) but it has such a high viscosity that it behaves as a solid. In some cases the crystallization of such materials can take place at a very slow rate and this changes the properties. This can occur in hard candy and it is necessary to prevent it by addition of a suitable material, often derived from starch.

In other cases, crystalline character is desirable and production of microcrystalline sugars by evaporation to 95 brix and submission to very high shear will yield very fine agglomerated crystals which are dried and milled. This type of product may have particular advantages such as being free flowing and rapidly dissolving. Similar sugars can also be produced from high quality cane syrups but the keeping quality may be rather limited.

(Continued on page 19)

ASCL Computer User's Group Meeting Set

By Herman Waguespack, Jr.

Mark your calendars for June 12, 1991 and plan to attend this year's workshop to be held at the Howard Johnson Lodge in Thibodaux beginning at 9:00 AM. This year's meeting promises to be an informative one with discussions planned for beginners and advanced computer users alike. We have invited Dr. Art Heagler and Mr. Brian McManus of The Louisiana Agriculture Center, Department of Ag. Economics and Agribusiness to demonstrate the budget planner program that has been developed at L.S.U. over the last several years. This same program generates the yearly report of projected costs and returns for each operation on the farm. Many of you have probably seen or used these figures in the past. They will demonstrate how this same program can be tailored to fit several different sugarcane farm situations. This program can be used as a template for growers to start with instead of starting from scratch. If you want a copy of the program and the 1991 data, bring two blank diskettes (5¼) to the meeting.

We have also planned a beginners session separate from an advanced session. This may help those of you who are just starting out with computers to get a better handle on what's needed in the way of equipment and getting familiar with computer terminology. Mr. Bob Moores of Computer Sales, Inc., Baton Rouge and Mr. Gary Robert of Robert Farms will be with us to present this topic.

For the advanced members of the group, sessions on DOS commands and general database usage are planned. This has been a requested topic that hopefully both mill and grower members will find helpful. Mr. Cliff Lebeouf and Mr. Jim Lopez of Computer Sales and Services, Houma will present this information.

Following these presentations a question and answer session will be scheduled. This will be an open session to allow anyone with suggestions and/or comments to speak up. We have also asked the speakers to bring some information on what's new in the computer world and what we can look for in the future. The meeting should be finished a little after noon.

THE RELEASE OF LHo 83-153

by WINDELL JACKSON, *SENIOR AGRONOMIST*

On April 23, 1991 the Variety Release Committee of the American Sugar Cane League met in the League office in Thibodaux. At the meeting, data and discussions were presented on two varieties which were candidates for release to the Louisiana cane growers in the fall of 1991. Scientists from LSU, USDA and the League entered into these debates. Mr. Howard Robichaux of Labadieville was present at the meeting. He was requested to give his feelings about varieties from a cane grower's viewpoint.

Mr. Dan Duplantis was Chairman of the three member committee and represented the League. The two other voting committee members were Dr. Ken Tipton, representing the Louisiana Agricultural Experiment Station and Dr. Ben Legendre, representing the USDA.

After input by all interested parties, the Committee voted to drop CP 82-551 from further consideration as a commercial variety for the Louisiana sugar industry. Of the many problems noted for CP 82-551, poor harvesting and low yield in plant cane crop were the most disappointing. It should be noted that CP 82-551 is a very strong stubbling cane, and for this reason, it was given a second chance at the 1990 Variety Advancement Committee Meeting.

The USDA requested that the prefix of the variety known as LCP 83-153 be changed to "LHo", and if there were no objections from the Hawaiian Breeding Program (whose varieties start with "H's") that the variety be known as LHo 83-153. The Committee voted unanimously for the change in prefix and for release of LHo 83-153. The "L" in the prefix indicates that the selection was made by the personnel in the LSU sugarcane variety selection program at St. Gabriel, LA. Normally seed for the USDA commercial variety selection program at Houma, LA is produced at Canal Point, FL (CP). The "Ho" is an indication that the seed for the variety was produced at Houma and not at Canal Point, FL.

This is a first for the crossing program at Houma. The crosses made at Houma are called basic crosses. These crosses are made in an effort to introduce genes from canes collected in regions where canes are found growing wild. It is believed that these wild canes contain genes for disease and insect resistance, cold tolerance, drought tolerance, stubble longevity, increased yield, and increased vigor that are not now found in the varieties used by commercial crossing programs.

LHo 83-153 yields of sugar per acre have equaled CP 70-321 in plant cane on both fine texture and coarse texture soils. Multi-year analysis for sugar per acre and tons of cane per acre indicate that on both light and heavy soils in both first and second stubble, LHo 83-153 yielded significantly higher than CP 70-321.

A more detailed varietal description and yield comparison will be published in the variety release statement in a later edition of the Sugar Bulletin. Dr. Keith Bischoff will present "Performance of the Sugarcane Variety LHo 83-153 in Replicated Yield Trials in Louisiana" at the June 20th afternoon Agricultural Section of ASSCT at the Monteleone Hotel, New Orleans, LA.

(Continued on page 13)

THE RELEASE OF LHo 83-153

(Continued from page 12)

The data on LHo 83-153 will also be presented at the June 27th American Sugar Cane League Contact Committee Meeting in Thibodaux, LA. At this meeting the release of LHo 83-153 will be voted upon by the cane growers of Louisiana. The amount of seed for release from the American Sugar Cane League Secondary Stations will be about normal.

The LSU selection team should be very proud of finding this variety and separating it from the pack. Those involved with the basic breeding program at Houma should likewise be very proud of making the cross in which the seed of LHo 83-153 was produced and especially proud of its release as a commercial sugarcane variety.

This is yet another example of the good things that come from the three-way agreement and the cooperation between LSU, USDA and the League. This cooperation will produce other outstanding varieties in the future. It is hoped that these new varities will bring us to a new plateau in sugar production for the state of Louisiana.

Liquid Fertilizers
For Sugar Cane

OUACHITA FERTILIZER

NEW IBERIA, LA. (318) 367-8233

MODEL 1162-H FORD COUNTY

HIGH CLEARANCE
6 CYLINDER DIESEL ENGINE
127 HORSE POWER
11.00 X 16 FRONT TIRES
20.8 X 16 R.I. REAR TIRES
9600 LB LIFT CAPACITY
DELUXE SEAT • ROLL BAR
35[M] CROP CLEARANCE
GEAR TYPE DROP HOUSINGS

PRICED TO SELL
OUT OF TOWN CALL TOLL FREE

1-800-969-0068

M & L INDUSTRIES INC.

1210 ST. CHARLES ST.
HOUMA, LA 70360
PHONE (504) 876-2280

American Sugar Cane League Honorary Members

Joseph G. Beaud, Sr., New Roads, LA
Charles H. Billeaud, Broussard, LA
Paul G. Borron, Jr., Plaquemine, LA
Joseph E. Boudreaux, Thibodaux, LA
Fred Clark, Franklin, LA
Jerry L. Dickson, New Orleans, LA
Gilbert J. Durbin, New Orleans, LA
F. Evans Farwell, New Orleans, LA
J. N. Foret, Jr., Thibodaux, LA
Andrew P. Gay, Plaquemine, LA
F. A. Graugnard, Jr., St. James, LA
Warren J. Harang, Jr. Thibodaux, LA
Kenneth Kahao, Port Allen, LA
Lloyd Lauden, New Orleans, LA
E. W. McNeil, Baton Rouge, LA
J. Randolph Roane, Jeanerette, LA
Charles C. Savoie, Sr., Belle Rose, LA
Edward T. Supple, Bayou Goula, LA
E. Berkshire Terrill, Jr., Brusly, LA
James Thibaut, Donaldsonville, LA
John "Sonny" Thibaut, Napoleonville, LA
M. V. Yarbrough, Fort Smith, AR

ATTENTION

ALLEE, ALLEE & ALLEN

Announces Its

Precision Grading Service
Lazerplane Equipped

★ Better drainage
★ Better weed control
★ Increase acreage

Also Agent for
Spectro Physics Laser Plane Sale

St. James, Louisiana 70086
(504) 265-3965

CANE TRACTOR PARTS
We ship & locate parts nationwide.

New, Used and Rebuilt Hi Crop and Row Crop Tractor Parts. Tires. Rebuilt Clutches, Crank Shafts. Injector Pumps and More. Also Any Hard-To-Find Parts. We Buy Farm Equipment & Salvage Tractors.

SAVE 50% & More!

CANE TRACTOR PARTS
Toll Free 1-800-738-2263 **Hwy. 90**
(318) 276-3453 **(318) 276-6230** **Jeanerette, LA**

CLASSIFIED

FOR SALE: JD Hi-Clearance 4230, 4010, 2 — 3020; JD 4430 PS; IH 1066; 1086; Land Level 40 ft.; JD 3-Row Chopper; JD 1630 16 ft. disk; Amico hipper 6 row; 6 shank V-ripper; 12' Grade blade on wheels new clipper discs blades, box scrapers. Call Grady Dugas, St. Martinville (Parks), La. (318) 845-4774.

FOR SALE: 2 Transfer Carts — $2,500 each. Call Danny Viator at Triple V Farm. (318) 856-5609 or (318) 856-7948.

FOR SALE: 2 — Bantam 15 ton rough Terrain Cranes — $16,500 each. 1 — Bantam 18 ton rough Terrain Crane — $19,500. Bayou Sale Contractors, Inc. Franklin, LA (318) 828-2290.

FOR SALE: 12,000 gallon storage tank & anhydrous amonia with new pump. Call (504) 473-1299 (day), 473-8966 (night).

FOR SALE: 1974 Thomson Harvester, 1 — 2394 Case Tractor 165 hp, 1 — 1394 Case 4WD Tractor. Call (504) 545-3715 or (504) 380-1897.

FOR SALE: 1988 Cameco 2-row Harvestor John Deere engine, factory cab and air, 791 hours split system. Call (318) 364-8903 (day), (318) 365-5036 (night).

FOR SALE: 12 — Bayou Service Tandem Wagons, 2 — Davis Tandem Wagons, 1 — 1987 Cameco SP1800 Cane Loader w/cab and chain piler, 1 — Broussard Cane Loader Mounted on Case 830 Hi-Clearance Tractor, 1 — Broussard Cane Loader Mounted on AC190 Hi-Clearance Tractor, 1 — 1981 JD 7720 Combine 1/JD 222 Platform and Mud Hog, 1 — 1981 JD 7720 Combine w/JD 220 Platform. Call Ourso Farms, Inc. (504) 545-3792 - shop, (504) 545-8338 - home.

FOR SALE: JD 3-Row Row Plow — $3,800, JD 1000 Field Cultivator — $1,200, JD 4-Row — $4,500, 3 — J&L Shavers — $450 each, 2 — Castognos Shavers — $600 each, JD C21 Field Cultivator — $700, JD 1630 Disk Harrow — $3,800, Fergson Drain Plow — $500, JD 6 Bottom Plow — $1,800, JD 4 Bottom Plow — $500, JD 3 Bottom Plow — $400, 3 — 1000 Gallon Amonia Tanks — $500 each, 1 — 10,000 Gallon Amonia Tank — $5,000, 2 — 3-Row Fertilizer App. — $1,000 each, Broussard Loader Mount Attachment — $1,000, 3 — Cane Trailers — $3,000 each, Prentis Transloaders — $8,000, J & L Single Row Harvester S1500 — $6,500, Call Caballero Planting Co., Inc. (504) 473-9394.

FOR SALE: Used SP1000 Loader. Contact Broussard Cane Equipment (318) 845-5080.

FOR SALE: IH 1066 Tractor, JD 1630 Disc Harrow (17 ft.), 3 — Tractor Mounted Cane Loaders, 1 — Hydrostat, 2 — IH 6-row Do-alls, Several sets of Discs. Call 1-800-738-2263.

WANTED: Rayne Plane Land Leveler, Tractors for Salvage, any make, age or condition, Running or Not. Also want to buy Hi-crop Tractors. Call 1-800-738-2263.

FARM NOTES *(Continued from page 7)*

League will be held on Thursday, June 27, 1991, at 1:30 p.m. at the Howard Johnson Motor Lodge in Thibodaux, La. The exact agenda has not been finalized but the topics will, like last year, center around those research projects which each of you as members of the League have funded through your League dues. This is a chance to see your money at work and hear the results of research which should be of benefit to you. All interested persons are invited to attend and ask questions of the speakers. In addition, there will be information concerning the recommended release of LHo 83-153. The League Staff encourages all members to attend this important meeting.

The 21st annual Joint Meeting of the Louisiana and Florida Divisions of the American Society of Sugar Cane Technologists will be held in New Orleans at the Monteleone Hotel on June 19, 20 and 21, 1991. The agenda for the meeting has been prepared by Program Chairman, Dr. Jeff Hoy. There are many very interesting papers to be presented in both the agricultural and manufacturing sessions. Industry members are encouraged to attend to hear research results not only from our own scientists here in Louisiana but also those of the Florida industry. Additional information can be obtained from this office or from Dalton Landry or Denver Loupe at (504) 388-4141.

The list of field days for 1991 has been prepared and distributed by Mr. Dalton Landry, County Agent and Coordinator of Sugarcane Educational Programs with the Louisiana Cooperative Extension Service and is as follows:

July 10, 8:30 am, Area Sugarcane Field Day, St. Gabriel Research Station, St. Gabriel, LA.

July 19, 9:00 am, Lafourche Parish Sugarcane Field Day, Southcoast Sugars, Inc., American Legion Home, Raceland, LA.

July 23, 2:00 pm, Assumption Parish Sugarcane Field Day, Jody Arcement Farm, Labadieville, LA.

July 25, 5:00 pm, Iberia Parish Field Day, Gralyn Farms, Patoutville, LA.

July 26, 8:30 am, Terrebonne Parish Sugarcane Field Day, USDA Sugar Station, Chacahoula, La.

August 1, 4:00 pm, St. Mary Parish Sugarcane Field Day, American Legion Home, Franklin, LA.

August 2, 2:00 pm, St. Martin Parish Sugarcane Field Day, Levert-St. John, St. Martinville, LA.

August 8, 2:00 pm, St. James Parish Sugarcane Field Day, Welcome Farms, Welcome, LA.

August 9, 9:30 am, Ascension Parish Sugarcane Field Day, McManor Plantation, Donaldsonville, LA.

August (date to be announced), Avoyelles-Rapides Parishes Sugarcane Field Day, Durwood and Pete Newton Farm, Bunkie, LA.

The XXI Congress of the International Society of Sugar Cane Technologists will be held in Bangkok, Thailand from March 5-14, 1992. This meeting is held every three years and alternates between the eastern and western hemispheres. Scientists from all around the world attend to present research findings in nearly all areas of sugarcane agriculture and processing. In addition, there will be both field and factory tours of the Thailand industry. This is the first time in several years that the meeting occurs at a time of the

(Continued on page 17)

 (Continued from page 16)

year when members of this industry might be interested in attending. Should anyone be interested in attending the meeting or finding out additional details call the League office. If enough members are interested in attending, it may be that group travel could be arranged. It may also be possible to schedule a tour of some other area along the way to Thailand if there is interest in that as well.

KENAF

There is a great deal of interest in the kenaf project that many of you have heard about being conducted in the Jeanerette/New Iberia area. There have also been some rumors flying around concerning the League's position on kenaf. The American Sugar Cane League currently has no position on the production of kenaf. A "no position" should not be confused with a negative position. At no time has the League ever considered a negative recommendation toward the production of kenaf. Some may then ask, "why hasn't the League given a positive recommendation?" The reason is simple. At this time there are still a number of unanswered questions concerning the production of kenaf which this author and the rest of the League Staff feel need to be answered before a positive recommendation can be given to the League's Board. A good scientist is one who has all the facts in hand before making a recommendation. Answers to questions about nematodes and other insect pests, diseases and weeds which might follow kenaf and have a harmful effect on cane production need to be closely examined before growers should vigorously pursue the concept of growing this crop. It has been reported in other areas that a build up of nematodes can occur with kenaf production. This sugarcane industry does not need additional problems and questions such as this should be answered before full-scale kenaf production becomes a reality.

There are a number of reasons why kenaf should be investigated as an alternative to the normal fallow operation. Mr. Harold Willet of Jeanerette, who has worked to establish a market for kenaf, especially for some of the specialty products such as the oil absorbent material or the biodegradable packing material. Additional income could be realized in the cane operation by those growing the kenaf. Other uses for kenaf include carpet padding, mats for the control of erosion in highway and industrial construction, and as a replacement for plastic or synthetic parts in automobiles. The question of kenaf production has been considered for many years primarily for use in paper and traditional fiber uses; however, these new environmental products and biodegradable products have thrown a different light on its use and it should be thoroughly tested for its potential profitability. Those producers interested in growing kenaf in the Teche area have formed a company, Natural Fibers of Louisiana, Inc., which has as its main function the growing, processing and marketing of products made from this fibrous plant. It is hoped that data can be accumulated quickly to determine whether or not kenaf can benefit our growers. Once these hurdles are cleared, then the future could be bright for kenaf in this new era of environmental concerns and the need for biodegradable materials.

COGONGRASS FOUND IN THE CANE BELT

A new grass weed has been identified within the cane belt. It is called

(Continued on page 18)

Congress Gives President Fast-Track Authority

On Thursday, May 23, the U.S. House of Representatives failed to pass a resolution of disapproval introduced by a vote of 192 to 231. The Senate also failed to pass a similar resolution introduced by Senator Ernest Hollings (D-SC). The Senate vote was 59 to 36. By granting the President Fast-Track authority, Congress must vote for or against any trade treaties or agreements, such as the Uruguay Round of the GATT or the North American, or Mexican, Free Trade Agreement, without amendments. Failure to pass the resolutions automatically gives the President Fast-Track authority for two years.

The Louisiana Delegation voted as follows:

To disapprove Fast-Track authority —
Senator J. Bennett Johnston (D)
Congressman Jimmy Hayes (D)
Congressman Clyde Holloway (R)

To extend Fast-Track authority —
Senator John Breaux (D)
Congressman Richard Baker (R)
Congressman Jerry Huckaby (D)
Congressman William Jefferson (D)
Congressman Robert Livingston (R)
Congressman Jim McCrery (R)
Congressman Billy Tauzin (D)

FARM NOTES

(Continued from page 17)

cogongrass (*Imperata cylindrica*) and may pose a threat to sugarcane production. It is considered a serious pest in other sugarcane producing areas in the world and can choke out other weeds and grasses. This grass has a scaly rhizome and grows to a height of about four feet. It is usually found growing in clumps or large tufts and flowers during the spring. Plants found within the industry flowered during April. The most striking feature in identifying this weed is its silvery-white flower resembling a small sugarcane or pampas grass flower. This plant, unlike most others, puts on a lot of top growth after flowering and, it is at this time that it can grow to its full height. The plant is also usually found growing in circular areas or if against a ditch will spread out in an arc from there. Identifying pictures can be seen here at the League Office and at your county agent's office. It is very important that we attempt to halt the spread of ths potentially serious weed pest before it gets well established.

WASHINGTON UPDATE

(Continued from page 6)

continues to be formidable. Leading the effort is President Bush with personal one-on-one lobbying with Members. The President is being supported by Cabinet Members and a long list of business and agricultural groups including the American Farm Bureau, National Association of Manufacturers and the U.S. Chamber of Commerce. A vote is expected in the House and Senate before June 1.

 (Continued from page 10)

In the sugar factories we are familiar with boiling the sugar syrups under vacuum to reduce temperature and minimize decomposition. In candy manufacture, operation at atmospheric pressure is common and the boiling points are high. A 95 brix sucrose solution at atmospheric pressure has a boiling point of 285°F. It is not easy to boil these materials to a fixed temperature to concentrate them and the alternative is to boil to a given consistency. The terms used for the consistence are traditional, for example, "feather" boiled to 230°F and "hard crack" which is boiled to 290°F.

Other cane products are used, especially in some soft candies, such as purified molasses (known as treacle in England and one of the treats as a child there was to have treacle on toast). These give a very distinctive and pleasant flavor but are of limited use.

A variety of alternatives to sucrose is available to the candy manufacturer and these substitutes can be used to replace sugar for either technological or health reasons. Until recently they have found few applications, mainly because early attempts to ultilize them were unsuccessful and the products were considered inferior to sucrose based products. The technology has now improved and the range of sucrose substitutes has been expanded and it is now possible to produce higher quality products since the limitations of individual sweeteners can be overcome by use of various sweetener combinations. As a result of this, sucrose is rarely used as the sole sweetener, though it remains the most important.

Glucose, from starch, is more reactive than sucrose and has a noticeable cooling effect. It is slow to crystallize and is used in fondants to modify texture by lowering the average crystal size. Fructose, also from starch, is used to increase sweetness, inhibit crystallization, improve moisture retention, promote caramelization (darkening on heating) and to enhance fruit flavors. Lactose (milk sugar) has limited use due to its low solubility and is used to reduce sweetness and sometimes to increase the whiteness. There is a whole range of starch hydrolysis products that are used to modify the properties of the candy, particularly the texture and crystallinity.

Some Sugar alcohols (the carbonyl reducing group of the sugar, such as glucose, is chemically converted to a hydroxyl group) are less readily metabolized and are used in the manufacture of diabetic and "sugar-free" (not causing dental problems) candies. The most important materials are sorbitol and xylitol.

There is a list given of the ingredients used in medicated confectionary and some of them are quite interesting. I wonder if some of them, such as creosote, linseed oil and extract of horehound, would be allowed if they were not traditional. This list is from Europe and may not be applicable here.

Last year I described the chromatographic process that we are working on for recovery of sugar from molasses. There can be quite considerable wastage in candy manufacture and this technology may have application for sugar recovery from such waste. It could offer an additional incentive for application of the process.

Commercial Members of the
AMERICAN SUGAR CANE LEAGUE
OF THE U.S.A., INC.

ASSUMPTION BANK & TRUST CO.
P.O. Box 398 Napoleonville, LA 70390

THE CROPMATE COMPANY
Fertilizer Region
P.O. Box 28 Thibodaux, LA 70302

CAMECO INDUSTRIES, INC.
P.O. Box 968 Thibodaux, LA 70302

FIRST COMMERCIAL BANK
521 Main St. Franklin, LA 70538

DUPLANTIER, HRAPMANN,
HOGAN, & MAHER
Certified Public Accountants
821 Gravier Suite 1300
New Orleans, Louisiana 70112

ESTES REFRACTORY
P.O. Box 94 Jeanerette, LA 70544

THE FIRST NATIONAL BANK
IN DONALDSONVILLE
P.O. BOX 108 Donaldsonville, LA 70346

GULF ENGINEERS & CONSULTANTS, INC.
535 Main Street
Baton Rouge, LA 70802

WESTWAY TRADING CORP.
228 St. Charles Ave., Suite 700
New Orleans, LA 70130

NADLER, INC.
P.O. Box 359
Plaquemine, LA 70765

NATIONAL BANK
FOR COOPERATIVES
Jackson Region
1800E, County Line Road
P.O. Box 16099
Jackson, MS 39236

OUACHITA FERTILIZER
Route 7, Box 49-F
New Iberia, LA 70560

DRAVO LIME COMPANY
Pelican State Division
12797 Scenic Highway
Baton Rouge, LA 70807

SELF INSURANCE ADMINISTRATORS
P.O. Box 11509
New Iberia, LA 70562-1509
A Member Company of Huval Insurance Group

FIRST SOUTH PCA
P.O. Box 667 Thibodaux, LA 70302
P.O. Box 10908 New Iberia, LA 70562

STANDARD SUPPLY & HARDWARE
CO., INC.
P.O. Box 60620 New Orleans, LA 70160

ST. MARY BANK & TRUST CO.
Franklin, LA 70538

LOUISIANA CANE MFG., INC.
P.O. Box 71 Thibodaux, LA 70301

WHITNEY NATIONAL BANK
228 St. Charles Avenue
New Orleans, LA 70130

RAYNE STATE BANK
AND TRUST COMPANY
P.O. Box 99
Duson, LA. 70529

3-D CHEMICAL, INC.
P.O. Box 607
St. Martinville, LA. 70582

J.I. CASE
P.O. Box 171818
Memphis, TN 38187-1818

e Sugar Bulletin
6 E. Bayou Rd.
ibodaux, La. 70301

BULK RATE
U.S. POSTAGE
PAID
PERMIT NO. 43
Thibodaux, La.

SERIALS DEPT.
LOUISIANA STATE UNIV
LIBRARY
BATON ROUGE LA 70803

The Sugar Bulletin

OFFICIAL BULLETIN OF THE AMERICAN SUGAR CANE LEAGUE OF THE U.S.A.

In This Issue

Up Front With The League by P. J. deGravelles, Jr. 4
Notice of Release of Sugar Cane Variety LH0 83-153 5
Farm Notes by Dr. Charley Richard 6
List of Stations Where LHo 83-153 is Available 7
Application for Seed Cane of Variety LHo 83-153 9
Washington Update With Don Wallace 10
More B.S. by Windell Jackson 12
In The Factory by Stephen J. Clarke 14

We stand for the encouragement of Home Industries as against Foreign Competition

Vol. 69 — No. 10 JULY 1, 1991

The Sugar Bulletin

The Official Organ of the American Sugar Cane League of the U.S.A., Inc.

P. J. deGravelles, Jr., Editor and General Manager
Charles A. Richard, Ph.D., Director of Research and Field Representative
Windell R. Jackson, Senior Agronomist
Herman Waguespack, Jr., Agronomist
John Constant, Business Manager
Nannette B. Nickens, Office Secretary
Paul G. Borron, III, Legal Counsel

Washington Representative:
Wallace and Edwards, Inc.
1150 Connecticut Avenue, N.W.
Suite 507
Washington, D.C. 20036
Phone: (202) 331-4331

Baton Rouge Representative:
Spradley and Spradley
6216 Riverbend Boulevard
Baton Rouge, LA 70820
Phone: (504) 766-1359

Editorial and Executive Office:
206 E. Bayou Rd., Thibodaux, LA. 70301
Phone: (504) 448-3707

OFFICERS AND MEMBERS OF THE BOARD OF DIRECTORS OF THE AMERICAN SUGAR CANE LEAGUE

Daniel Viator, Ph.D, Youngsville, LA
President

Branan Beyt, Jeanerette, LA
1st Vice-President

P. J. "Pete" deGravelles, Franklin, LA
Vice President — General Manager

Don Wallace, Washington, DC
Vice President — Government Relations

Patrick Cancienne, Belle Rose, LA
Treasurer

Irving Legendre, Jr., Thibodaux, LA
Secretary

Manuel Acosta, Raceland, LA
Bryan Allain, Jeanerette, LA
J. G. Beaud, Jr., New Roads, LA
Ramon E. Billeaud, New Orleans, LA
Felix Blanchard, New Iberia, LA
Ronald Blanchard, Napoleonville, LA
Neal Bolton, St. James, LA
Lawrence Dugas, New Iberia, LA
Dan Duplantis, Raceland, LA
John F. Gay, Plaquemine, LA
Ronald Gonsoulin, New Iberia, LA
Mike Graugnard, Edgard, LA
Warren Harang, III, Donaldsonville, LA
Roddy Hulett, St. Martinville, LA
Bobby Judice, Franklin, LA
Roger Kahao, Port Allen, LA
Denis Lanaux, Killona, LA
Melvin Landry, New Iberia, LA
A. J. LeBourgeois, Baldwin, LA
D. C. Mattingly, Paincourtville, LA
Jerry McKee, Thibodaux, LA
William S. Patout III, Jeanerette, LA
Kenneth Peltier, Thibodaux, LA
Stanley Pipes, Franklin, LA
R. L. Roane, Jeanerette, LA
Howard Robichaux, Labadieville, LA
Raphael Rodriguez, Franklin, LA
Mel Schudmak, White Castle, LA
Frank Sotile, Donaldsonville, LA
David Stewart, Lakeland, LA
Roland Talbot, Thibodaux, LA
Jackie Theriot, Breaux Bridge, LA
Charles Thibaut, Donaldsonville, LA
Glenn Timmons, Brusly, LA
Carlton Townsend, Bunkie, LA
Eugene Woods, Paincourtville, LA

Best Values in New Equipment

After three years, nothing matches the MAGNUM warranty.

Five years or 5,000 hours. That's the coverage you get—at no extra charge—on every new MAGNUM™ tractor. In fact, it's the same warranty* that covers every MAGNUM tractor ever built.

And, while the competition offers an occasional free warranty, they haven't put it on every tractor. Besides, only MAGNUM's 5-year/5000-hour warranty can be fully transferred without a fee. That gives the MAGNUM tractor's already high resale value another boost. And it gives you another good reason to buy.

See us today about an on-farm demonstration. Once you work one, you'll understand why MAGNUM means more than ever.

*Excluding tires, which are covered by their own manufacturers' warranties. A $200 deductible applies to each repair after the first year.

© 1991 J I Case

See These Case IH Dealers

Switzer Sales and Service
Jeanerette, LA
(318) 276-6384

Gremillion's, Inc.
New Roads, LA
(504) 638-6347

Lanier Int'l. Inc.
Abbeville, LA
(318) 893-1988

Lemann's Farm Supply Inc.
Baton Rouge, LA
(504) 357-6453

Thibodaux, LA
(504) 447-3776

Donaldsonville, LA
(504) 473-7927

case IH

UP FRONT WITH THE LEAGUE

By P. J. deGravelles, Jr.

The following testimony was presented by Dr. Charles A. Richard, Director of Research and Field Representative, at a Louisiana Department of Environmental Quality hearing on proposed Solid Waste Rules. The hearing was held on April 29, 1991 in Baton Rouge, Louisiana.

Mr. Secretary,

My name is Dr. Charles Richard. I am the Director of Research and Field Representative for the American Sugar Cane League of the USA, Inc., a trade organization representing all 20 of the raw sugar processing mills in Louisiana and farmers who produce approximately 95% of the sugarcane grown in Louisiana. My testimony today is presented on behalf of the American Sugar Cane League. We appreciate this opportunity to present our views on the proposed Louisiana Department of Environmental Quality Solid Waste Rules (SW02).

The Louisiana sugar industry has now completed its 195th consecutive harvest season. During these nearly two centuries of cane production, the principles of cane planting, cultivation, harvesting and processing have not changed appreciably. However, improved varieties, new technologies in cultural practices and raw sugar processing along with improved farm and factory equipment have made the industry more efficient in light of reduced labor availability, new sugarcane pests (diseases, insects and weeds), and increased governmental regulation. Today, the Louisiana sugar industry ranks among the most modern and mechanized of sugar industries worldwide.

During the two centuries of cane production, the boundaries of the Louisiana sugar industry have remained fairly constant. Some 300,000 acres are now in production within the triangle of New Orleans to Alexandria to Lafayette. The industry is fairly compact and the majority of the acres which are devoted to sugarcane have only cane grown on them. Practices that produce maximum yields of sugar while preserving the soil, air and water for future generations have been implemented over the years. Some of these practices have placed Louisiana sugarcane producers and processors among some of the original "by-product recyclers"

Sugarcane production involves the growing of the cane stalks in fertile soil which generally requires only small amounts of the basic elements of nitrogen, phosphorus and potassium to supplement the amounts already found naturally in the soil. Crop protection chemicals (CPCs) to assist in cultural practices along with integrated pest management practices are used to control weeds and insects. Only EPA labeled CPCs are recommended and used in the sugarcane industry. During the processing of sugarcane, lime (which is also an approved amendment to adjust the soil's pH level) is added to the cane juice which helps to flocculate the soil and remove it from the juice after it is extracted from the cane plant. Lime

(Continued on page 16)

LOUISIANA AGRICULTURAL EXPERIMENT STATION
LOUISIANA STATE UNIVERSITY AGRICULTURAL CENTER
BATON ROUGE, LOUISIANA
and
UNITED STATES DEPARTMENT OF AGRICULTURE
AGRICULTURAL RESEARCH SERVICE
WASHINGTON, D.C.
and
AMERICAN SUGAR CANE LEAGUE of the U.S.A., INC.
THIBODAUX, LOUISIANA

NOTICE OF RELEASE OF SUGARCANE VARIETY LHo 83-153

The Louisiana Agricultural Experiment Station of the Louisiana State University Agricultural Center, the Agricultural Research Service of the United States Department of Agriculture and the American Sugar Cane League of the U.S.A., Inc., working cooperatively to improve sugarcane varieties, have jointly developed and hereby announce the release of a new variety, LHo 83-153, for commercial planting in the fall of 1991.

LHo 83-153 is a product of the cross CP 77-405 X CP 74-339. LHo 83-153 is a high yielding, good stubbling variety. Data from mechanically harvested outfield trials on both silt loam and clay soils indicate the LHo 83-153 is superior to CP 70-321 in yield of sugar and cane per acre in stubble crops. LHo 83-153 is intermediate between CP 74-383 and CP 70-321 in sugar per ton and maturity, with fiber content similar to CP 65-357. The variety has been assigned a mill factor of 0.992. The variety is generally erect but is less suited to mechanical harvesting than CP 65-357.

The variety is resistant to the spread of the sugarcane mosaic virus in the field. LHo 83-153 is considered moderately resistant to smut (caused by *Ustilago scitaminea* Syd.) and appears resistant to rust (caused by *Puccinia melanocephala* H & P Syd.) under Louisiana field conditions. Ratoon stunting disease caused significant reductions in cane and sugar per acre yields in stubble of LHo 83-153. This variety is resistant to the sugarcane borer [*Diatraea saccharalis* (F.)]. Preliminary data suggest LHo 83-153 is tolerant of most herbicides used in sugarcane production.

Seed cane will be distributed by the American Sugar Cane League. Inquiries concerning seed cane should be directed to the American Sugar Cane League, 206 E. Bayou Rd., Thibodaux, LA 70301. The Louisiana Agricultural Experiment Station and the United States Department of Agriculture do not have seed cane available for distribution.

Each agency will make such news releases as considered appropriate.

K. W. Tipton
Director, Louisiana Agricultural Experiment Station

R. D. Plowman
Administrator
Agricultural Research Service

Daniel P. Viator
President, American Sugar Cane League of the U.S.A., Inc.

FARM NOTES By Dr. Charley Richard

CROP REPORT — WEED CONTROL — RESEARCH FUNDING

In my last article I reported on the extensive rains which had fallen through May 27. Since that time and up to June 25, an additional 4.47 inches have fallen bringing the total rainfall at the League office in Thibodaux up to 70.07 inches for the year. There was a period of about one week during the last days of May and the first week of June when little rainfall was experienced in most of the cane belt. It was during this time that much of the cane belt received fertilizer and some cultivation. A considerable portion of the field work was done rough and the current crop situation, although improved, is still not as good as early expectations. There was some breakage in the cane that was cultivated late but at least there is now some row contour in these fields which should help at harvest time to pick up lodged cane and also should give some stubble protection this winter. Unfortunately, much of the belt was not adequately cultivated. In the meantime, smut, borers, rust, brown spot, grass, lack of tillering, yellow cane from waterlogged soils, and broken cane from late fertilizing and the drain cleaner tractor have all contributed to a somewhat pessimistic outlook for the crop. League Agronomists have seen these factors and agree that the crop is not what was hoped for but still believe that with the extra plant cane acreage in the state in 1991 there is still the opportunity to make an average crop for the industry as a whole. It is unfortunate that within the belt some individuals who suffered more than others from the flooding will be hurt very badly. The League will continue to look for ways to assist these growers.

WEED CONTROL

With the poor weed control achieved this spring and the large amount of grass now seen in many fields, it is obvious that this will be a dirty crop. The extensive weed cover that has come up in the fallow fields this year may cause additional problems in plant cane fields in 1992. Also, weed seeds from ditch banks and non-crop areas were moved about extensively in the flood waters that the cane belt experienced during this rainy period. For these reasons it is suggested that growers pay particular attention to weed control at planting time during 1991. The practice of applying herbicides at planting time is not an area to cut back on especially this year with the added grass pressure now being experienced.

RESEARCH FUNDING

The Dedicated Research Funding Committee met during late February to consider the 1991 program and recommended a funding level of $230,970. This expenditure was approved by the Board of Directors. The projects that will be funded during this year include the following topics with their respective lead authors:

F. A. Martin: Labor for off-station sugarcane research (Louisiana Agricultural Experiment Station).

H. P. Viator: Supporting sugarcane research at the Iberia Research Station.

USDA Station: Labor for USDA Station (Houma, La.) research.

S. B. Milligan: Sugarcane cross appraisal methodology.

(Continued on page 21)

LIST OF STATIONS WHERE LHo 83-153 IS AVAILABLE

The American Sugar Cane League has been directed by the Louisiana Agricultural Experiment Station and the U. S. Department of Agriculture to undertake a fair and impartial distribution of the newly released variety of cane known as LHo 83-153.

It has been grown with the understanding that those growing it shall be paid the price of mill cane plus a bonus, and the League is authorized by the Louisiana Agricultural Experiment Station and the U. S. Department of Agriculture to charge a distribution fee of $1.00 per ton.

If you wish to order seed cane of this new variety please fill out the application form found in this issue of THE SUGAR BULLETIN. NO OTHER FORM OF APPLICATION WILL BE ACCEPTED AND IT MUST BE RECEIVED AT THE OFFICE OF THE AMERICAN SUGAR CANE LEAGUE, P. O. DRAWER 938, THIBODAUX, LA 70302, NO LATER THAN FRIDAY, AUGUST 9, 1991.

The price of the cane is **$36.00** per ton, cut and loaded on your vehicle at the secondary station. The cane will be cut with a mechanical harvester. There is no guarantee expressed or implied that the seed offered is free of mixtures, diseases, insects, weeds or weed seeds.

For the convenience of the delivering and handling of LHo 83-153, the League is requesting purchasers to name three secondary stations from which they are willing to receive cane. The League will attempt to fill all orders from one of the three selected secondary stations. If this is not possible the order will be filled from the nearest secondary station. If only one secondary station is named and the order cannot be filled from that station then the order will be filled from a secondary station selected by the League.

On August 9, 1991, all seed will be allocated and there will be no switching of secondary stations.

The secondary stations possessing LHo 83-153 are:

Parish	Station	Operator	Address
Ascension	New Hope	James Thibaut	Donaldsonville
	Evan Hall	Churchill & Thibaut	Donaldsonville
Assumption	Belle Alliance	Churchill & Thibaut	Donaldsonville
	Lula	Savoie Farms	Belle Rose
	Glenwood	Thibaut Farms	Napoleonville
	Little Texas	Donald Peltier	Napoleonville
	Elm Hall	E. G. Robichaux	Labadieville
	Goldmine	Thibodeaux Bros.	Labadieville
Iberia	Caroline	Herman Walet	Loreauville
	Northside Pltg. Co.	Jackie, Clint and Chad Judice	New Iberia
	Lawrence Dugas	Lawrence Dugas	New Iberia
	Ulysee Gonsoulin	Ronald Gonsoulin	New Iberia
	Enterprise	M. A. Patout & Son	Patoutville
	Ronald Hebert	Ronald Hebert	Jeanerette

(Continued on page 8)

LIST OF STATIONS *(Continued from page 7)*

Parish	Station	Operator	Address
Iberville	St. Louis	St. Louis Planting	Plaquemine
	Cannonburg	Ross Campesi, Jr.	White Castle
	Frank Pearce & Sons	Frank Pearce & Sons	Maringouin
Lafayette	Triple V Farm	Daniel Viator	Youngsville
Lafourche	Leighton	Godfrey Knight	Thibodaux
	Georgia	South Coast Sugars	Raceland
	McLeod	Valentine Sugars	Lockport
Pointe Coupee	Alma	Alma Pltg. Co.	Lakeland
St. James	Graugnard Farms	Graugnard Farms	St. James
	Blackberry	Blackberry Farms	Vacherie
St. John	Glendale	T. Lanaux & Sons	Lucy
St. Martin	B & T Farms	Dane Berard	Breaux Bridge
	Comb Farm	Jackie Comb	Breaux Bridge
	Levert St. John	Levert St. John	St. Martinville
St. Mary	Frank Martin Farms	Robert Judice	Franklin
	Sterling	Sterling Sugars	Franklin
	Breaux Bros.	Hebert Breaux	Franklin
	Northside Pltg. Co. (Oaklawn)	Jackie, Clint and Chad Judice	Franklin
	Ralph Longman	Ralph Longman, Jr.	Baldwin
	Allain	A. V. Allain	Baldwin
	Leroy & Wayne Leblanc	Leroy & Wayne Leblanc	Bladwin
Terrebonne	Belle Grove	Sylvester Hebert	Schriever
	Magnolia	Daniel Naquin	Schriever
Vermillion	Edward Zenon Farm	Edward Zenon	Abbeville
West Baton Rouge	Cinclare	Robert Farms	Gonzales

CANE TRACTOR PARTS

We ship & locate parts nationwide.

New, Used and Rebuilt Hi Crop and Row Crop Tractor Parts, Tires, Rebuilt Clutches, Crank Shafts, Injector Pumps and More. Also Any Hard-To-Find Parts. We Buy Farm Equipment & Salvage Tractors.

SAVE 50% & More!

CANE TRACTOR PARTS

Toll Free 1-800-738-2263 **Hwy. 90**

(318) 276-3453 **(318) 276-6230** **Jeanerette, LA**

THE LAST DAY ON WHICH APPLICATIONS FOR SEED CANE OF LHo 83-153 CAN BE ACCEPTED IS AUGUST 9, 1991

The cane will cost $36.00 per ton. The League will keep $1.00 per ton and give the rest to the Secondary Stations. The League will make every effort to fill orders at locations selected by applicants.

Please be informed that some locations may be short on seed. It is important that you fill out the application completely (including first, second, and third choices) so that we might provide you with the best service.

Tear Off Application Below and Mail

APPLICATION FOR LHo 83-153 SEED CANE

Date _____

TO: American Sugar Cane League of the U.S.A., Inc.
P. O. Drawer 938, Thibodaux, LA 70302

Gentlemen:

I hereby apply for _____ tons of LHo 83-153 seed cane: I agree to pay when an allocation is assigned to me, and I am to be notified concerning this and supplied with the name and address of the grower from whom I am to get the cane, which I will send for on delivery dates in September or October, 1991. I understand that this cane will not be trash free.

If for any reason this order cannot be filled, it is understood that my money will be refunded to me.

My ***1990 total acreage*** in cane for ***sugar and seed*** was _____ acres.
My ***1991 total acreage*** in cane for ***sugar and seed*** is _____ acres.
The locations I wish to receive my allocation from are:

1st choice _____

2nd choice _____

3rd choice _____

This application is made with the full understanding on my part that it may not be possible to get as much as I apply for, and that there is no guarantee expressed or implied that this seed is free of mixtures, diseases, insects, weeds or weed seeds.

My farm is located between these two towns: _____

and _____

PLEASE PRINT

Name _____

Mailing Address _____

City _____ Zip _____

Phone # (Day) _____ (Evening) _____

DO NOT SEND MONEY NOW

WASHINGTON UPDATE WITH DON WALLACE

FINAL RULING ON DISASTER PAYMENT PROGRAM FOR 1990 CROPS

On June 4, 1991, the final rule was published by the USDA setting forth the regulations which are necessary to establish the criteria to be used in making assistance available to eligible producers. A Disaster Payment Program has been implemented to make disaster payments to eligible producers of sugar cane, sugarbeets, peanuts and soybeans who have suffered a loss of production of their 1990 crop as the result of a natural disaster in 1989. The program will be administered under the general supervision of the Administrator, ASCS, and shall be carried out in the field by State and parish ASCS committees. Applications for payments should be filed by the applicant with the parish office serving the area where the producer's farm is located no later than June 28, 1991.

SUGAR REPRESENTATIVES MEET WITH USTR STAFF

On June 11, staff representatives of various sugar cane and sugarbeet organizations met in Washington with staff at the U.S. Trade Representative's office. The purpose of the meeting was to review the status of the GATT trade talks in Geneva. Don Wallace and Macon Edwards represented the League at the meeting.

After an update on technical matters under discussion in Geneva, sugar representatives questioned USTR Staffer, Susan Early, on matters of concern to the U.S. sugar industry. Topmost on the list of concerns is Section 22 protection and percentage reductions in price support loans. League representatives expressed concern with a 30% reduction in loans because the European Community supports sugar at 31 cents compared to U.S. loan of 18 cents. Sugar reps emphasized to USTR that a 30% reduction in both would leave U.S. producers at a comparative disadvantage with EC producers.

Sugar industry representatives were astounded when Ms. Early indicated she had seen data that showed EC price supports are no higher than those of the U.S. Ms. Early was immediately asked the source of her data and she quoted a study that was made in 1984 where US/EC currency differentials were substantially different from current conditions. The meeting ended with sugar representatives expressing frustration with USTR's misunderstanding of fundamental facts regarding sugar. Steps are now being considered to be sure that USTR's perception of the sugar program in the EC and US is corrected. Louisiana growers need to understand the difficulty of dealing with GATT problems when officials in Washington work under such misconceptions as these.

SUGAR PRICE SUPPORT PROGRAM

The proposed rule which would amend the regulations with respect to the Sugar Price Support Program was released on June 11, 1991. This program is conducted by the Commodity Credit Corporation (CCC) in accordance with the 1949 Agriculture Act. The rule is necessary in order to implement changes of the Food, Agriculture, Conservation and Trade Act of 1990 and to authorize the Price Support Program for the 1991 through 1995 crops of sugar cane and sugarbeets.

(Continued on page 18)

GOODYEAR

GOODYEAR TIRES FOR YOUR CAR, TRUCK, FARM OR OFF HWY. EQUIPMENT

- 24 HR. ROAD SERVICE
- COMPLETE AUTOMOTIVE CERTIFIED SERVICE
- TRUCK TIRE BALANCE AND ALIGNMENT

NOBODY FITS YOU LIKE GOODYEAR

SPECIAL SURE-GRIP TD-8

SUPER TRACTION • SUPER STRENGTH

GENERAL ELECTRIC AUTHORIZED DEALER

7:30 AM - 6:00 PM MON. - FRI.
7:30 AM - 1:00 PM SAT
1203 ST. PATRICK HWY
THIBODAUX

PIT STOP
YOUR ON FARM SERVICE SPECIALIST

GOODYEAR AUTO SERVICE CENTER

1-800-256-1269 (504) 447-2696

Introducing Ultra-Command ™ Powershift:

MODEL 8830 FORD TRACTOR

ULTRA-COMMAND POWERSHIFT
170 P.T.O. HORSEPOWER
FRONT WHEEL ASSIST
16.9 X 28 R1 Front Tires
20.8 X 38 R1 REAR TIRES
22½ INCHES CROP CLEARANCE
WHISPER QUIET CAB
3 YEAR WARRANTY • NO DEDUCTIBLE

There's never been a powershift like this!

Call or Stop In Today **1-800-969-0068**

M & L INDUSTRIES INC.

1210 ST. CHARLES ST.
HOUMA, LA 70360
PHONE (504) 876-2280

More B. S.

By: Windell Jackson, Senior Agronomist

Yes you are correct, we do have more **B**orers and **S**mut than in the past few years. By the end of the first full week of June, many fields were showing 3 to 5 joints. This number of exposed joints is not normally found until the middle of July. Fields of CP 72-370, CP 74-383, and CP 79-318 are tall and have the most joints.

In scouting fields that historically have early borer problems — Stan Viator, of Viator's Ag Advisory Service, Youngsville, LA is finding many mature borers. These borers are capable of boring into the joints that are now present. It is his feeling that some of these fields will reach levels of infestation which will require an application of insecticide before the middle of June.

At the writing of this article, due to excessive rain and backwater, some growers are still trying to finish fertilizing and cultivating their crops. Also, much fallow land has not been plowed for the first time. Most growers who check their own fields have not considered checking for borers in June.

Borers can cause a reduction in sugar per acre by reducing both sugar per ton of cane and tons of cane per acre. As borers tunnel, they destroy cells used for juice storage. This reduces the amount of juice in the stalk making the stalk more fibrous, thereby reducing the sugar content and stalk weight. Additional weight is lost when breakage occurs at the weakened point where borers enter. This breakage can be caused by strong wind or by the harvester.

Both, CP 74-383 and CP 79-318 are very susceptible to infestations and damage by borers. Fields of these two varieties should be checked regularly — and if needed, treated to prevent infestations that could cause economical losses. The variety CP 79-318 is a very brittle variety with high harvesting losses. If badly bored, harvesting problems and losses due to scrap increase drastically.

Many growers are finding more than a normal amount of smut in their fields of CP 65-357. Smut whips are found in plant cane and stubble fields. The indications are that economical losses in most fields of plant cane will be very small, however some of the stubble fields will have a greater loss. In a field of first stubble CP 65-357, this author recently observed the heaviest smut infections he has ever seen. No counts have been made, due to rain that has fallen since this observation was made. Hopefully counts can be made before this article goes to press and a percentage of smut whips can be determined.

Data collected by Dr. Jeff Hoy, Plant Pathology and Crop Physiology Department, Louisiana Agricultural Experiment Station, LSU Agricultural Center, Baton Rouge, LA, indicates for every 1% of smut infection there is a corresponding 0.8% reduction in yield. This data was collected from four tests of varying degrees of smut infections.

Many growers are questioning why there is so much smut with all of the rain that we have had this spring. They have been told that smut spores germinate quickly under wet conditions and do not buildup in the soil.

In many areas of the cane belt, there was a long dry spell at the end of the 1990 summer and during planting. During this time there were many reports of the germination of lateral buds. Upon

(Continued on page 22)

FOR THE
LATEST
INFORMATION
in the
SUGARCANE
INDUSTRY
and
FARM
PRODUCTS

READ
and
ADVERTISE
in

THE
SUGAR
BULLETIN

THE SUGAR BULLETIN

Mailing List Update

☐ Address change. Please attach top portion of front cover containing your name and address.

☐ I no longer wish to receive THE SUGAR BULLETIN. Please remove my name from your mailing list.

Name _____

Address _____

City _____

State _____ Zip _____

Mail to:

THE SUGAR BULLETIN
P.O. DRAWER 938
THIBODAUX, LA. 70302

For changes in present subscription, address imprint from front cover **must be attached.**

IN THE FACTORY

Stephen J. Clarke
Audubon Sugar Institute
Louisiana Agricultural Experiment Station

SOUTH AFRICAN SUGAR INDUSTRY

I am writing this in a hotel room overlooking the Indian Ocean in Durban, South Africa. I am here to attend the annual meeting of the South African Sugar Technologists Association which was last week and the International Society of Sugar Cane Technologists workshop on Factory Operations which is just about to begin. In between the two meetings there was opportunity to visit several factories, something I wanted to do for several years.

My visit here has been very pleasant and the hospitality has been excellent. I have renewed old friendships and met people that I have only read about. There have been a number of surprises for me in what my expectations of South Africa were. It is winter here and when I landed in Johannesburg it was much colder than I expected, but Durban, on the coast, is much milder. Durban is a large and modern city which could be anywhere on the Gulf Coast of the United States or on the south of France. Perhaps most surprising, for a country that is going through a major political upheaval, it is very quiet everywhere I have been. Politics and the future structure of South Africa are the major topics of conversation with almost everyone expressing optimism an irreversible process of political change has begun but the final outcome is far from certain. All groups, the sugar industry included, look forward to the end of international isolation. The sugar industry continues to modernize and expand and a new mill is to be built in the northern part of the country. In some cane areas, however, there is loss of cane due to urbanization and the timber which is grown for production of paper pulp for export.

The published proceeding of the South African Sugar Technologists Association are a major source of interesting and up to date information. It was a treat to be able to attend and listen to the very high level of discussion that followed the papers. Most papers dealt with practical factory matters and the most common factor was the attention to detail. The factories here all understand and have implemented the basic technology required for a modern industry and the emphasis is now upon efficiency (both process and energy), loss avoidance and environmental factors.

The conference began with an overview of the previous crop which, in its published form, gives extensive details of factory performance for the previous crop. The overall trend is towards increasing recovery and decent juice purities for the last few years have helped this. Both extraction (by mill and diffuser) are increasing and the boiling house recovery are very good, but one cannot but wonder if the effort involved in achieving these numbers are appropriate. For example, a diffuser, using imbibition levels over 500% on fibre, reached an extraction of over 99%, a new record. Since there was sufficient fibre to produce steam and the cane throughput was lower than the design capacity, the decision is typically to

(Continued on page 23)

Are You a Member of the American Sugar Alliance?

The American Sugar Alliance is a national coalition of citizens dedicated to supporting domestic sweetener industry. It encompasses beet, cane and corn farmers who produce sugar and corn for sweetener — and also includes thousands of other Americans who work in sugar production and processing as well as in other related industries. We're working hard to assure that farmers and workers in the U.S. sweetener industry service in a world of heavily subsidized sugar.

Join us, won't you? Write or call for information on our individual or corporate memberships.

(202) 457-1437

1225 Eye St. N.W., Washington, DC 20005

CLASSIFIED

FOR SALE: 2 Transfer Carts — $2,500 each. Call Danny Viator at Triple V. Farm (318) 856-5609 or (318) 856-7948.

FOR SALE: 1988 Cameco 2-row Harvestor John Deere engine, factory cab and air, 791 hours split system. Call (318) 364-8903 day, (318) 365-5036 night.

FOR SALE: Used SP1000 Loader. Contact Broussard Cane Equipment (318) 845-5080.

FOR SALE: IH 1066 Tractor, JD 1630 Disc Harrow (17 ft.), 2 — IH 6-row Do-alls, Rayne Plane 41 ft. Land Leveler, Several sets of Discs. Call 1-800-738-2263.

WANTED: Tractors for Salvage, any make, age or condition, Running or Not. Also want to buy Hi-crop Tractors. Call 1-800-738-2263.

(Continued from page 4)

has been used throughout the world for over 300 years in the sugar making process. Sugarcane production and raw sugar processing, as compared to many other plant commodities, involve little in the way of chemical additives as evidenced by the acceptance of sugar as a "natural product".

Sugarcane also plays an important role in protecting the environment. During the growth stages of the sugarcane plant, approximately 11 tons of carbon dioxide are removed from the air during metabolic processes while some 7 tons of oxygen are produced on each acre in production. Additionally, sugarcane has the ability to trap and absorb ozone, sulfur dioxide, and carbon monoxide, helping to cleanse the air of some of the unwanted pollutants found in Louisiana.

After the processing of sugarcane into raw sugar there are some residual products. These are a result of the residue of the cane plant after juice extraction, called bagasse, and field soil which is transported to the factory along with the cane.

Bagasse, or the non-juice material in the plant, is used primarily as a fuel source in all Louisiana raw sugar processing plants. Utilizing the sugarcane plant itself as a renewable fuel for processing enables the Louisiana sugar industry to conserve considerable amounts of fossil fuel energy. Fly ash is the residue of the burnt bagasse and is returned to the soil as an amendment. Small amounts of excess bagasse can be used in construction materials and as compost for use as a soil amendment. These materials contain the natural products found within the sugarcane plant. As a soil amendment, the organic nature of the plant residue adds valuable organic matter and improves the fertility and workability of most soils. Observations made over many years throughout the world would indicate these materials contain little if any undesirable elements.

As a result of the mechanization of the harvest process, field soil is often moved with the cane supply to the factory, especially under rainy conditions. A portion of the field soil is washed off the cane stalks prior to grinding while the remainder of the soil is precipitated out of the extracted juice by the addition of lime and is then called filter press mud. Both sources of soil present a disposal problem for the factory and have always been distributed back to the cane fields. The addition of this soil which now contains some bagasse adds valuable organic matter to the fields and also returns some nutrients to the soil thus reducing the need for chemical nutrient inputs. This field soil along with excess bagasse and fly ash can also be composted and returned to the fields in a more enriched manner.

The value of both by-products, bagasse and soil, is considerable to the industry. As a fuel source, bagasse not only increases the efficiency of the industry but also reduces the fossil fuel energy needs of the industry. As a soil amendment, filter press mud and wash water mud increase the organic matter content of the sandier soils and can reduce the nutrient requirements to be added to the soil. Both by-products contain the natural sugarcane plant or the soil upon which it was grown with very little additions. Both products have been found to be below critical levels of pollutants.

(Continued on page 17)

UP FRONT WITH THE LEAGUE

(Continued from page 16)

The proposed rules of the Louisiana Department of Environmental Quality concerning solid waste and recycling create some problems with regard to the Louisiana sugar industry. Returning bagasse and or filter press mud to cane fields constitute recycling rather than disposal. The American Sugar Cane League recommends that the handling of farm grown plant materials and soil be handled differently from that of industrial by-products. This can be done by clarifying the language regarding "exemptions" under the proposed Section 301 A.1. by simply insuring that these materials can be applied to lands as long as it is done in accord with accepted agricultural practices. The current wording of ". . . on the site where the crops are grown" is overly restrictive and not realistic in terms of reuse of crop residues.

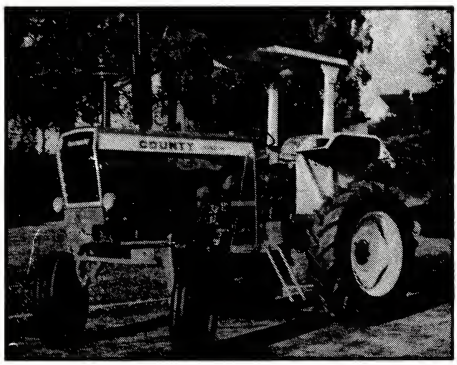
In summary, our concern is that we in the sugarcane industry be allowed to continue a practice that is beneficial from both an agricultural and environmental standpoint. We feel that by doing so we are working toward and assisting in meeting the goals of waste reduction and recycling.

Thank you for the opportunity to comment and we stand ready to work with you in any way to insure that our concerns are reflected in the final regulations.

THE SUGAR BULLETIN
(504) 448-3707

MODEL 1162-H FORD COUNTY

HIGH CLEARANCE
6 CYLINDER DIESEL ENGINE
127 HORSE POWER
11.00 X 16 FRONT TIRES
20.8 X 16 R.I. REAR TIRES
9600 LB LIFT CAPACITY
DELUXE SEAT • ROLL BAR
35 INCH CROP CLEARANCE
GEAR TYPE DROP HOUSINGS



PRICED TO SELL
OUT OF TOWN CALL TOLL FREE

1-800-969-0068

M & L INDUSTRIES INC.
1210 ST. CHARLES ST.
HOUMA, LA 70360
PHONE (504) 876-2280

The regulations set forth the terms and conditions under which price support loans shall be entered into by the CCC with eligible processors. Copies of the proposed rule are available upon request from the League Office. ***Comments must be received on or before July 11, 1991, in order to be assured of consideration.***

NEW SUGAR REGULATIONS EXPECTED

Two new sets of sugar regulations governing the domestic sugar program are expected to be released within the next 30 days. Regulations dealing with the 1% marketing assessment, or "program service fee (PSF)," for sugar that was included in the 5-year, $492 million deficit reduction package last October have cleared the final hurdle at the Office of Management and Budget (OMB) and may be released late June. In addition, the sugar industry is also anxiously awaiting the completion of the proposed rules for marketing allocations. Once these proposed rules are published in the Federal Register, the sugar industry will have an appropriate amount of time to submit written comments to the ASCS.

FAST-TRACK FALLOUT

Following House-Senate approval of fast-track procedures for GATT (reported in last newsletter), sugar industry representatives have been meeting in Washington to discuss strategy. While not fully developed yet, strategy will no doubt include expanded involvement of the Congress in acting as a watchdog as talks progress. Commodity groups affected by Section 22 (sugar, cotton, dairy, peanuts) are conducting joint strategy meetings to develop future action. Louisiana growers will be kept advised through the newsletter as the strategy evolves.

DISASTER HEARINGS HELD IN HOUSE AG COMMITTEE

The House Agriculture Committee earlier this month responded to increasing hardships caused by spring flooding and other adverse weather conditions with a day-long hearing to brief committee members on extent of disaster.

Sub-committee Chairman Jerry Huckaby (D-LA) and other members of Congress in the House and Senate are known to be drafting legislation and are speculating that another farm disaster relief bill will be considered by Congress this summer. League representatives in Washington will continue to monitor any developments in this arena due to adverse weather in Louisiana sugar-production areas.

CROP PRODUCTION REPORT RELEASED

Sugar production figures, released by the USDA on June 11, 1991, show that sugarcane produced for sugar in 1990 totaled 26.5 million tons, 6% less than in 1989. A sharp reduction in Louisiana, largely the result of a severe freeze in December of 1989, plus a decline in Hawaii were only partially offset by larger crops in Florida and Texas. The average yield of 36.4 tons per acre compares with 34.9 a year earlier. The area harvested totaled 726,400 thousand acres, 10% less than a year earlier.

Total sugar production of 6.99 million tons raw value from the 1990 sugarcane and sugarbeet crops was up 6% from last year. The larger sugar output came from the sugarbeet crop. The sugar output from the sugarcane crop was off slightly.

(See Sugarbeet Table on page 19)

WASHINGTON UPDATE *(Continued from page 18)*

SUGARBEETS 1/

State	Area Planted		Area Harvested		Yield	
	1989	1990 2/	1989	1990 2/	1989	1990 2/
	1,000 ACRES				Tons	
CA	176.0	172.0	169.0	167.0	27.3	26.1
CO	40.6	40.8	40.0	40.0	22.8	23.6
ID	179.0	188.0	177.0	186.0	22.8	26.0
MI	154.0	160.0	150.0	157.0	17.1	20.8
MN	342.0	368.0	341.0	364.0	16.0	14.8
MT	52.7	55.2	51.9	55.1	19.9	22.5
NE	70.1	75.1	62.2	71.0	18.8	21.0
ND	180.2	193.9	180.1	193.2	15.7	14.4
OH	13.6	20.0	11.9	19.2	16.7	18.5
OR	15.9	17.2	15.2	16.7	25.7	29.2
TX	36.6	41.9	35.3	41.0	21.0	24.8
WY	61.8	65.0	59.3	63.8	19.2	20.5
OTH 4/	1.9	2.3	1.6	2.2	27.5	29.5
US	1,324.4	1,399.4	1,294.5	1,376.2	19.4	20.0

	Production		Price Per Ton		Value of Production	
	1989	1990 2/	1989	1990 3/	1989	1990 3/
	1,000 Tons		Dollars		1,000 Dollars	
CA	4,614	4,359	42.30		195,172	
CO	912	944	43.70		39,854	
ID	4,038	4,836	43.60		176,057	
MI	2,565	3,266	41.90		107,474	
MN	5,456	5,387	40.80		222,605	
MT	1,033	1,240	43.60		45,039	
NE	1,169	1,491	43.20		50,501	
ND	2,828	2,782	40.20		113,686	
OH	199	355	40.80		8,119	
OR	391	488	40.80		15,953	
TX	743	1,017	41.30		30,686	
WY	1,139	1,308	45.10		51,369	
Oth 4/	44	65	40.50		1,783	
US	25,131	27,538	42.10		1,058,298	

1/ Relates to year of intended harvest except for overwintered spring planted beets in California. 2/ Revised. 3/ Estimates are not available U. S. marketing year average price, value of production and parity price will be published in "Agricultural Prices," released July 31, 1991. State estimates will be published in "Crop Values" to be released January 1992. 4/ Includes NM and WA.

Crop Production
June 1991

A-14

Agricultural Statistics Board
NASS, USDA

(See Sugarcane Table on page 20)

SUGARCANE

State	Area Harvested		Yield 1/		Production 1/	
	1989	1990 2/	1989	1990 2/	1989	1990 2/
	1,000 ACRES		Tons		1,000 Tons	
			For Sugar			
FL	405.0	419.0	31.4	35.5	12,717	14,874
HI	74.7	72.0	94.8	90.8	7,082	6,538
LA	290.0	201.0	25.7	20.6	7,440	4,150
TX	33.6	34.4	24.7	26.5	830	913
US	803.3	726.4	34.9	36.4	28,069	26,475
			For Seed			
FL	15.0	15.0	31.4	35.5	471	533
HI	6.7	7.0	29.1	26.4	195	185
LA	25.0	44.0	25.7	20.6	643	906
TX	1.9	1.8	25.3	20.6	48	37
US	48.6	67.8	27.9	24.5	1,357	1,661
			For Sugar And Seed			
FL	420.0	434.0	31.4	35.5	13,188	15,407
HI	81.4	79.0	89.4	85.1	7,277	6,723
LA	315.0	245.0	25.7	20.6	8,083	5,056
TX	35.5	36.2	24.7	26.2	878	950
US	851.9	794.2	34.5	35.4	29,426	28,136

	For Sugar				For Sugar and Seed	
	Price Per Ton		Value of Production		Value of Production	
	1989	1990 4/	1989	1990 4/	1989	1990 4/
	Dollars		1,000 Dollars			
FL	30.70		390,412		404.872	
HI	29.70		210,335		216,127	
LA	27.00		200,880		218,241	
TX	21.00		17,430		18,438	
US	29.20		819,057		857,678	

1/ Yield and production refer to net weight. 2/ Revised. 3/ Price per ton of cane for sugar used in evaluating value of production for seed. 4/ Estimates are not available. U. S. marketing year average price, value of production, and parity price will be published in "Agricultural Prices," released July 31, 1991. State estimates will be published in "Crop Values" to be released January 1992.

Crop Production
June 1991

A-15

Agricultural Statistics Board
NASS, USDA

FARM NOTES *(Continued from page 6)*

E. O. Dufrene: Harvestability of candidate varieties at Ardoyne Farm.

E. O. Dufrene: Increasing efficiency of stage IV (replicated nursery) testing in the variety development program.

B. L. Legendre: Assessment of brittleness of candidate sugarcane varieties.

W. H. White: Evaluation of commercial and experimental canes for resistance to the Mexican Rice Borer.

B. W. S. Sobral: Construction of a genetic map and a map-based gene cloning system for sugarcane (*Saccharum spontaneum*) by using the arbitrarily-primed polymerase chain reaction and pulsed-field gel electrophoresis.

A. M. Heagler: An assessment of production efficiency within the production and primary processing sectors of the Louisiana Sugar Cane Industry.

R. Ricaud: Stubble cane longevity and succession cane.

ASCL: Developing an improved harvesting, loading and transport system for Louisiana.

T. E. Reagan: Yield loss assessment and management of the Yellow Sugarcane Aphid on sugarcane.

W. H. Long: Studies of the biology and management of soil pests of sugarcane.

W. H. White: Heritability of sugarcane borer resistance.

J. W. Hoy: Investigations on the current status, evaluation, and heritability of resistance to stalk rots and factors affecting disease severity.

M. P. Grisham: A search for resistance to Ratoon Stunting Disease.

J. L. Griffin: Itchgrass control research in sugarcane.

E. P. Richard, Jr.: Minimizing bermudagrass-induced losses in sugarcane yields by shaving and varietal selection.

G. A. Breitenbeck: Production of an organic fertilizer by ammoniation of sugarcane wastes.

F. A. Martin: Development of water management guidelines for Louisiana sugarcane factories.

H. S. Birkett: Boiler proposal.

H. S. Birkett: Quality and operations controls through the use of scales.

S. J. Clarke: Increased productivity through monitoring of factory and cane yard.

S. J. Clarke: Control of evaporator scaling.

S. J. Clarke: Improved clarification of cane juice.

M. Saska: Desugarization of sugarcane molasses.

L. R. Verma: Sugarcane analysis using Near Infrared Spectroscopy.

ATTENTION

ALLEE, ALLEE & ALLEN

Announces Its

Precision Grading Service
Lazerplane Equipped

★ Better drainage
★ Better weed control
★ Increase acreage

Also Agent for
Spectro Physics
Laser Plane Sale

St. James, Louisiana 70086
(504) 265-3965

MORE B. S. *(Continued from page 12)*

observation many of these side shoots were producing smut infection symptoms and smut whips. Smut infected lateral buds were noted on CP 65-357, CP 70-321 and CP 74-383. A collection of swelling and germinating buds with no smut symptoms was placed in a green house. Many of these buds produced smut whips.

As buds near the soil surface germinated during the summer and fall, they could have been easily infected by a larger than normal amount of viable spores in the soil. Due to the mild winter, many of these buds that would have normally been killed by freezing temperatures, survived to produce the crop and the smut that is now in the field.

Seed plots should be checked to determine the amount of smut in them. Seed cane should not contain more than a 2% infection of smut. If possible seed cane should be rouged to remove smut.

The smut ratings for recommended varieties are:

Susceptible	Moderately Resistant	Resistant
CP 65-357	CP 79-318	CP 70-321
CP 74-383	LHo 83-153	CP 72-370
CP 76-331		LCP 82-89

If extremely high amounts of smut are found in any of the moderately resistant or resistant varieties, please contact your local County Agent, Scientist or the League.

Tell Them You Saw It In
THE SUGAR BULLETIN

Farm Financing From Folks Who Understand.

Sometimes it's hard to explain — to someone who doesn't know your business — why you need money and how you plan to use it.

At First South Production Credit Association you won't have to educate our loan officers.

They understand farming and they'll tailor a financing package to fit your needs.

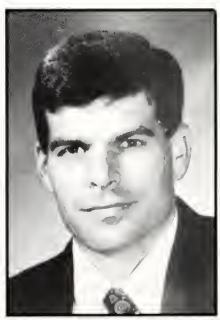
We'll help you buy that new tractor, get the crop in this year, make farm improvements or just keep the cash flow flowing.

Because You Deserve It.

Give us a call.

First South Production Credit Association

DEAN MARTIN
Thibodaux



ANDY ANDOLSEK
Thibodaux

PATSY CHAMPAGNE
New Iberia

maximize the use of the available equipment, in this case the evaporators. Similarly, the low grade ends of the boiling house tend to be large to squeeze all the sugar from the molasses. The quality of the analytical data and chemical control in this industry is very high and the results obtained can be confidently believed.

There has been much equipment development in the South African industry and one of the most interesting papers was "Reassessment of Some Equipment Innovations at Mainstone Mill" by Bruce Moor. To quote from the abstract — "Many innovations made in factories are reported at congresses of technologists associations shortly after implementation. These reports usually cover origin, design and commissioning of new equipment, together with initial operating results. However, true success is only proved by realiable performance over a sustained period. In this report a number of previously reported innovations are reviewed after extended periods in service. . . . protracted use has confirmed the success of most, but problems have been experienced with some." The items covered include the tongaat shredders, entrainment seperators, scrubbers, vertical crystallizer drives, boilers, draught fans and cane delivery systems. Minor changes have been made in, for example, the shredder, but performance has proved its value and also the importance of good cane preparation. References are made to the original papers and this approach to reviewing equipment and practices would be very interesting in the Louisiana sugar industry.

South African factories usually have cooling crystallizers for A, B and C-Massecuite. There was a short paper given by Alain Jullienne on whether the

(Continued from page 14)

B-Crystallizers are justified and this was followed by a detailed and entertaining discussion of the subject. The level of knowledge of the factory personnel was most impressive on this (and other) subjects. The conclusion of the paper was that A-Massecuite Crystallizers are justified but not for B-massecuite. Many other papers were given and I will be bringing copies with me when I return to Louisiana.

In many ways the technical highlight of my trip so far was a visit to Felixton Factory. This was first run in 1984 and incorporates the most modern technology available. It is large, clean and spacious with all equipment new and laid out on a master plan which has not yet been added to. Continuous pans are used for all massecuites and two diffusers for extraction. The computerized control room is almost like being on the bridge of the starship "Enterprise" and the whole factory can be seen from it. But, to quote one of the directors of the company when the factory was built — "much care for engineering, little care for money."

The South African sugar industry welcomes visits of processors and engineers from other countries and I would encourage Louisiana sugar people to visit this dynamic industry.

Liquid Fertilizers
For Sugar Cane

NEW IBERIA, LA. (318) 367-8233

Commercial Members of the
AMERICAN SUGAR CANE LEAGUE
OF THE U.S.A., INC.

ASSUMPTION BANK & TRUST CO.
P.O. Box 398 Napoleonville, LA 70390

THE CROPMATE COMPANY
Fertilizer Region
P.O. Box 28 Thibodaux, LA 70302

CAMECO INDUSTRIES, INC.
P.O. Box 968 Thibodaux, LA 70302

FIRST COMMERCIAL BANK
521 Main St. Franklin, LA 70538

DUPLANTIER, HRAPMANN,
HOGAN, & MAHER
Certified Public Accountants
821 Gravier Suite 1300
New Orleans, Louisiana 70112

ESTES REFRACTORY
P.O. Box 94 Jeanerette, LA 70544

THE FIRST NATIONAL BANK
IN DONALDSONVILLE
P.O. BOX 108 Donaldsonville, LA 70346

GULF ENGINEERS & CONSULTANTS, INC.
535 Main Street
Baton Rouge, LA 70802

WESTWAY TRADING CORP.
228 St. Charles Ave., Suite 700
New Orleans, LA 70130

NADLER, INC.
P.O. Box 359
Plaquemine, LA 70765

NATIONAL BANK
FOR COOPERATIVES
Jackson Region
1800E, County Line Road
P.O. Box 16099
Jackson, MS 39236

OUACHITA FERTILIZER
Route 7, Box 49-F
New Iberia, LA 70560

DRAVO LIME COMPANY
Pelican State Division
12797 Scenic Highway
Baton Rouge, LA 70807

SELF INSURANCE ADMINISTRATORS
P.O. Box 11509
New Iberia, LA 70562-1509
A Member Company of Huval Insurance Group

FIRST SOUTH PCA
P.O. Box 667 Thibodaux, LA 70302
P.O. Box 10908 New Iberia, LA 70562

STANDARD SUPPLY & HARDWARE
CO., INC.
P.O. Box 60620 New Orleans, LA 70160

ST. MARY BANK & TRUST CO.
Franklin, LA 70538

LOUISIANA CANE MFG., INC.
P.O. Box 71 Thibodaux, LA 70301

WHITNEY NATIONAL BANK
228 St. Charles Avenue
New Orleans, LA 70130

3-D CHEMICAL, INC.
P.O. Box 607
St. Martinville, LA. 70582

J.I. CASE
P.O. Box 171818
Memphis, TN 38187-1818

BROUSSARD, BUSH HURST, INC.
11764 Haymarket Dr.
Baton Rouge, LA 70816

e Sugar Bulletin
6 E. Bayou Rd.
ibodaux, La. 70301

BULK RATE
U.S. POSTAGE
PAID
PERMIT NO. 43
Thibodaux, La.

SERIALS DEPT.
LOUISIANA STATE UNIV
LIBRARY
BATON ROUGE LA 70803

The Sugar Bulletin

OFFICIAL BULLETIN OF THE AMERICAN SUGAR CANE LEAGUE OF THE U.S.A.

In This Issue

Up Front With The League by P. J. deGravelles, Jr. 4
Washington Update With Don Wallace 6
Farm Notes by Dr. Charley Richard 7
The Baton Rouge Line by Tom and Linda Spradley 9
Current Smut Conditions by Windell Jackson 10
In The Factory by Stephen J. Clarke 11
Sugarcane Planting Recommendations & Suggestions for Louisiana Sugarcane Producers - 1991 12
Recommended Rules and Regulations 16
Can We Continue To Grow Smut Susceptible Varieties? by Jeff Hoy and Mike Grisham 17

We stand for the encouragement of Home Industries as against Foreign Competition

Vol. 69 — No. 11 AUGUST 1, 1991

The Sugar Bulletin

The Official Organ of the American Sugar Cane League of the U.S.A., Inc.

P. J. deGravelles, Jr., Editor and General Manager
Charles A. Richard, Ph.D., Director of Research and Field Representative
Windell R. Jackson, Senior Agronomist
Herman Waguespack, Jr., Agronomist
John Constant, Business Manager
Nannette B. Nickens, Office Secretary
Paul G. Borron, III, Legal Counsel

Washington Representative:
Wallace and Edwards, Inc.
1150 Connecticut Avenue, N.W.
Suite 507
Washington, D.C. 20036
Phone: (202) 331-4331

Baton Rouge Representative:
Spradley and Spradley
6216 Riverbend Boulevard
Baton Rouge, LA 70820
Phone: (504) 766-1359

Editorial and Executive Office:
206 E. Bayou Rd., Thibodaux, LA. 70301
Phone: (504) 448-3707

OFFICERS AND MEMBERS OF THE BOARD OF DIRECTORS OF THE AMERICAN SUGAR CANE LEAGUE

Daniel Viator, Ph.D, Youngsville, LA
President

Branan Beyt, Jeanerette, LA
1st Vice-President

P. J. "Pete" deGravelles, Franklin, LA
Vice President — General Manager

Don Wallace, Washington, DC
Vice President — Government Relations

Patrick Cancienne, Belle Rose, LA
Treasurer

Irving Legendre, Jr., Thibodaux, LA
Secretary

Manuel Acosta, Raceland, LA
Bryan Allain, Jeanerette, LA
J. G. Beaud, Jr., New Roads, LA
Ramon E. Billeaud, New Orleans, LA
Felix Blanchard, New Iberia, LA
Ronald Blanchard, Napoleonville, LA
Neal Bolton, St. James, LA
Lawrence Dugas, New Iberia, LA
Dan Duplantis, Raceland, LA
John F. Gay, Plaquemine, LA
Ronald Gonsoulin, New Iberia, LA
Mike Graugnard, Edgard, LA
Warren Harang, III, Donaldsonville, LA
Roddy Hulett, St. Martinville, LA
Bobby Judice, Franklin, LA
Roger Kahao, Port Allen, LA
Denis Lanaux, Killona, LA
Melvin Landry, New Iberia, LA
A. J. LeBourgeois, Baldwin, LA
D. C. Mattingly, Paincourtville, LA
Jerry McKee, Thibodaux, LA
William S. Patout III, Jeanerette, LA
Kenneth Peltier, Thibodaux, LA
Stanley Pipes, Franklin, LA
R. L. Roane, Jeanerette, LA
Howard Robichaux, Labadieville, LA
Raphael Rodriguez, Franklin, LA
Mel Schudmak, White Castle, LA
Frank Sotile, Donaldsonville, LA
David Stewart, Lakeland, LA
Roland Talbot, Thibodaux, LA
Jackie Theriot, Breaux Bridge, LA
Charles Thibaut, Donaldsonville, LA
Glenn Timmons, Brusly, LA
Carlton Townsend, Bunkie, LA
Eugene Woods, Paincourtville, LA

Best Values in New Equipment

After three years, nothing matches the MAGNUM warranty.

Five years or 5,000 hours. That's the coverage you get—at no extra charge—on every new MAGNUM™ tractor. In fact, it's the same warranty* that covers every MAGNUM tractor ever built.

And, while the competition offers an occasional free warranty, they haven't put it on every tractor. Besides, only MAGNUM's 5-year/5000-hour warranty can be fully transferred without a fee. That gives the MAGNUM tractor's already high resale value another boost. And it gives you another good reason to buy.

See us today about an on-farm demonstration. Once you work one, you'll understand why MAGNUM means more than ever.

*Excluding tires, which are covered by their own manufacturers' warranties. A $200 deductible applies to each repair after the first year.

© 1991 J I Case

See These Case IH Dealers

Switzer Sales and Service
Jeanerette, LA
(318) 276-6384

Gremillion's, Inc.
New Roads, LA
(504) 638-6347

Lanier Int'l. Inc.
Abbeville, LA
(318) 893-1988

Lemann's Farm Supply Inc.
Baton Rouge, LA
(504) 357-6453

Thibodaux, LA
(504) 447-3776

Donaldsonville, LA
(504) 473-7927

case IH

UP FRONT WITH THE LEAGUE

By P. J. deGravelles, Jr.

The following address was delivered by Jackie Theriot, President of the Louisiana division of the American Society of Sugar Cane Technologists at the joint Louisiana-Florida meeting held in New Orleans, Louisiana on Thursday, June 20, 1991.

PRESIDENT'S MESSAGE — ASSCT — NEW ORLEANS

The "mother of all freezes" is hopefully one we will not experience in Louisiana for another 100 years. As last year's president of the ASSCT-La. Div. indicated in his message, the coldest temperature recorded was 8.9 degree F. The continuous freezing temperature lasted for a record 80 hours. Ice could be detected at a 4 inch depth in the soil.

The loss from the December, 1989 freeze is now recorded history. Louisiana produced 4,648,384 tons of sugarcane during the 1990 harvest. The harvest of 1989 produced 8,329,310 tons of sugarcane. Total sugar produced in 1990 is 432,297 tons as compared to 1989 at 842,094. In 1990, 192,000 acres of sugarcane was harvested as opposed to 299,000 in 1989. The total monetary loss to the economy amounted to nearly $200,000,000 to the growers, processors, and landlords.

It had been decades since a factory did not operate in Louisiana for a season due to climatic conditions. However, after several weeks of pessimistic reports on the condition of the crop due to the freeze, two cooperative factories in the western area of the sugarcane belt agreed to harvest together at one factory. This decision proved to be a wise choice for the farmers and may enhance possible mergers in the future.

When one draws a line representing the snowfall in Louisiana during December of 1989, it is obvious that the snowfall had an insulating effect on the sugarcane stubble. South of the snowfall line an average of 75% of a normal crop was harvested. North of this line the average harvested dropped to 47% in the western region and 44% in the eastern region of the cane belt. As much as 72% of the crop was lost at certain factories.

With the S&L, FmHA, and private bank problems, liberal credit has disappeared. Many growers in Louisiana have experienced problems in receiving the necessary funds for their 1991 crop. The pendulum has swung from a liberal "sign on the dotted line" for funding to the conservative attitude that if one cannot cashflow by 110% then certain refusal will be the outcome. Unfortunately, many farmers have experienced a delay in acquiring necessary funding.

As prices hover in the 21 cent range, the continued question of whether or not there was too much sugar imported into this country is being answered daily. The MSP level has not been reached for a number of weeks now. Whether the appointment of Edward Madigan as the new Secretary of Agriculture will have any impact is yet to be experienced.

He was one of 91 members of the

(Continued on page 5)

(Continued from page 4)

House to vote against the farm bill because it strayed too far from the 1985 farm bill's market-oriented policies.

As we approach the 21st century environment has become a foremost concern of the citizens of this country. That is good! In remembering that we were placed on this planet to provide for the propagation of future generations our society will have to devote more time, effort, and money to the environmental problems. The sugarcane industry must bear a fair share of these concerns.

The sugarcane industry in Florida has taken the lead in realizing that necessary steps must be mandated to assist in a continuation of that industry. Albeit the serious implications regarding thousands of acres of sugarcane land, the industry will have to continue to police itself, due to the problems of Lake Okechobee and the Everglades.

In Louisiana, we are in the midst of tighter controls in regards to air and water quality. An environmental committee has been in place for a few weeks now within the American Sugar Cane League. As a standing committee it is working to protect the environment while maximizing the efficiency of the Louisiana sugar industry. By strengthening existing technologies and developing improved strategies, Louisiana's natural resources of air, water, and soil can be protected for the public as well as for future generations of sugarcane producers and processors. The goal of the committee is to achieve a balance between maximum productivity and a healthy environment by working through governmental agencies, legislative bodies and researchers. This group will also work to provide adequate data on which to base future legislation regulating practices that affect the environment and will work directly with state and federal environmental agencies in their efforts to protect the natural resources of Louisiana.

Some in our industry have expressed concerns that environmental policies are too strict because costs outweigh benefits — or too lax because the benefits of stricter controls exceed the costs. The debate goes on in large part because so little is known about the magnitude of the beneficial effects of pollution control policies. We should not propose to settle the debate by providing a measure of these benefits. That is not the answer! Most of us understand that excessive pollution is occurring throughout the world. How long can this planet last at the current rate of pollution? Scientists, with data from satellites, have come to the conclusion that the necessary ozone layer in the upper atmosphere has been reduced by 5% since 1973, double the rate they suspected prior to satellite transmissions presently being forwarded to our laboratories.

Prudence requires us to get our heads just a little further out of the sand and 'go' after some solid answers. One thing that is certain: environmental pressures are just beginning. State and local governments and certain business leaders are responding to this pressure, not just reactively, but aggressively seeking opportunities to act as social catalysts.

The shift to an environmental civilization will not be easy, fast and cheap. But there is growing national consensus that it must happen. People are embracing a new consciousness, a

(Continued on page 18)

WASHINGTON UPDATE WITH DON WALLACE

SUGAR MARKETING ASSESSMENTS

As reported in the July issue, the proposed regulations governing marketing assessments have been released. While these regulations are effective immediately, they are not final and may be amended based on current comments being presented to the USDA. The proposed or interim rule sets forth the standards necessary for the collection of the nonrefundable marketing assessment imposed on sugar processed from domestically grown sugar beets and sugarcane as required by the Omnibus Reconciliation Act of 1990. For the 1991 through 1995 crops of sugarcane and sugar beets, the first processor shall remit to CCC a nonrefundable marketing assessment in an amount equal to .18 cents per pound of raw cane sugar and .193 cents per pound of beet sugar.

Domestic sugar producers are taking issue with two requirements in the interim regulations. First, during preliminary discussions, the producers had urged the USDA to make the assessment payable after the sugar is marketed or sold. Under the current proposal, remittances will be due on a monthly basis and shall be payable to the CCC by the last day of the month following the month in which the sugar beets or sugarcane were processed.

Second, although the rules state that the assessment covers the 1991 - 1995 crops of sugar cane and sugar beets, it specifies that the assessment be paid on all sugar and sugar products (but not intermediate products such as thick juice) processed during the 1991 through 1995 crop years — after June 30, 1991, until July 1, 1996. Caught in the middle of the crop assessment are domestic producers who have intermediate product from the 1990 beet crop which will be processed into sugar after June 30, 1991.

We are monitoring this situation and will keep the League apprised of any further actions concerning the marketing assessments.

LOUISIANA RECOVERY TO BOOST FY 1992 PRODUCTION

For fiscal year 1991!92, a strong recovery in Louisiana's sugar production is expected to boost U.S. output to a near-record 7.3 million tons, according to the USDA's Sugar and Sweetener Situation and Outlook Yearbook. Cane sugar output is forecast at 3.4 million tons, up 7.9% from 1990!91, and beet sugar is forecast at 3.9 million, up 1.3 percent.

While heavy rains this spring in some areas of Louisiana could dampen prospects, USDA's initial forecast of production is 835,000 tons, up almost 400,000 tons from last year. Florida's output is expected to total 1.65 million tons, down 150,000 tons. Hawaii's fiscal output is expected to slip by 3.4% to 820,000 tons, reflecting lower acreage harvested and disappointing yields. Beet sugar production is forecast to increase moderately from the previous year.

ANN VENEMAN SWORN IN AS DEPUTY SECRETARY OF AGRICULTURE

Ann M. Veneman was sworn in last month as Deputy Secretary of Agriculture, becoming the first woman to occupy the number two position at USDA. As Deputy Secretary, Veneman

(Continued on page 21)

FARM NOTES By Dr. Charley Richard

CROP REPORT — VARIETIES TO PLANT — PLANT THIS CROP WELL

At the present time, the crop is growing rapidly in most areas of the cane belt. Extremely hot temperatures and an adequate supply of water have provided growth rates in excess of an inch a day in many fields. Some of the poorer fields which had not tillered well and have plenty of smut in them look weak at the current time. Some of these fields are very yellow and have many dried out lower leaves. It is expected that some of these fields may give poor yields but the majority of cane fields in the belt should still give average to above average yields. The total official acreage that will be harvested is still as yet undetermined. As of this writing on July 16, it is expected that there are some 335,000 to 340,000 total acres of cane (for sugar and seed) of which 310,000 should be harvested for sugar. This estimate is based on numbers received from factories as well as estimates made by extension personnel. However, the Louisiana Statistical Reporting Service has reported to USDA that they have estimated some 370,000 acres for sugar and seed. Where the extra 30,000 acres come from are still uncertain, but this is the official number that is being used in Washington at this time. There will be a chance to make corrections to this number when the official ASCS numbers are released during the next two months. During 1989 there were some 320,000 acres for sugar and seed while in 1990 there were some 240,000 total acres. It is hoped that an accurate acreage figure will be determined before the Secretary makes calculations for possible marketing allotments before the end of the current fiscal year.

VARIETIES TO PLANT

Elsewhere in this issue of the Sugar Bulletin are printed the recommendations for 1991 for planting sugarcane. Included are not only the recommended varieties but also furrow width, planting rate, depth of covering and weed control recommendations. Growers should read these carefully and follow the suggestions as they are based on the best available research data and information which has been collected over many years.

Among the varieties recommended for planting, growers will still find CP 65-357 and CP 70-321, the two oldest varieties on the list. Although having been around for many years and past their prime, growers still know the most about them and can count on them for their strong points and know what weak areas to expect. This year many growers have commented on the large amount of smut in CP 65-357 and some have said that they will not plant it because of smut. The large percentage of smut has a lot to do with the weather patterns of this past fall and winter. Because this weather has been somewhat unusual it may be too hasty a decision and growers should attempt to find clean seed of CP 65-357 and continue to plant it if this variety has given good yields in the past. CP 70-321 has not given good yields of second stubble especially following hard winters but has proven consistent in plant cane yields. These two varieties will probably still occupy the majority of the acreage for most farms until one of the newer varieties can prove itself to be better. Most growers plan to expand LCP 82-89 to the fullest since plant cane stands look very good and the test data continues to show its good yields and harvestability. Each of the other varieties have some problem or problems that growers are aware of and have held the acreage in each of them down to a smaller level.

(Continued on page 8)

FARM NOTES *(Continued from page 7)*

PLANT THIS CROP WELL

Last fall most growers made the largest planting they have ever made. Consequently, there is an unusually large percentage of plant cane acreage in the state (approximately 60%) which has an investment value of over $680 per acre including fallow and seed bed preparation, planting, spring and summer operations and overhead costs. This large plant cane crop now growing in the field has an investment worth over $140 million and is undoubtedly the most expensive investment ever made in the history of this industry. It is therefore, most important that growers use the best available technology to complete this crop so that maximum yields of sugar can be produced from this investment.

This year, many growers once again will have a larger than normal planting. Since the 1991 crop has been somewhat affected by the wet weather and returns may not be as good as earlier expected, it again becomes very important that growers concentrate their efforts on making the best planting possible. Practice good fallow ground procedures and prepare the seed bed as best as possible before planting. These practices will pay off in the long run. Follow the planting recommendations as carefully as possible. Use the best weed control available. All of these practices will not guarantee a perfect crop but will give you the best opportunity to make a good crop to help recoup some of the losses following the December 1989 freeze. It is also important that you keep accurate planting records and make detailed maps of where each variety is planted. These records, although time consuming now, will pay off in the future.

Introducing Ultra-Command ™ Powershift:

MODEL 8830 FORD TRACTOR

ULTRA-COMMAND POWERSHIFT
170 P.T.O. HORSEPOWER
FRONT WHEEL ASSIST
16.9 X 28 R1 FRONT TIRES
20.8 X 38 R1 REAR TIRES
22½ INCH CROP CLEARANCE
WHISPER QUIET CAB
3 YEAR WARRANTY • NO DEDUCTIBLE

There's never been a powershift like this!

Call or Stop In Today **1-800-969-0068**

M & L INDUSTRIES INC.

1210 ST. CHARLES ST.	HOUMA, LOUISIANA 70360	504/876-2280
3811 HWY. 90 EAST	BROUSSARD, LOUISIANA 70518	318/837-2763
5810 AIRLINE HWY.	BATON ROUGE, LOUISIANA 70805	504/355-7716

THE BATON ROUGE LINE

By Tom and Linda Spradley

With less than a week remaining in the legislative session, sugar appears to be in good shape. The bad bills have been killed, and some good bills have been passed.

Of key interest are two workers compensation bills. One of them, already passed, deals with seasonal workers, allowing the amount paid to be based on year long earnings instead of the short period of time they are employed when sugar is harvested and milled. The other bill, put together by Senator Mike Foster and Representative Charlie Melancon, is a major rewrite of the workers compensation system, and should improve it dramatically.

Also, of key interest are two environmentally related bills. The "air toxics" bill requires DEQ to promulgate less stringent rules and regulations than those it had set forth in accordance with the air toxics legislation passed in 1989. This, obviously, favors us. Additionally, a bill passed by Representative Jimmy Martin will make it more difficult for DEQ to promulgate rules and regulations injurious to agriculture. Rules set forth by DEQ shall have to be reviewed by the Chancellor of LSU's Agricultural College prior to review by Legislative Oversight. A resolution by Representative John Travis which more closely parallels the Executive Order issued by Governor Roemer will only be moved to final passage if the Governor does not sign Martin's bill into law.

Following is a status report of the key bills we have followed for you throughout the session.

HB 1210 (Melancon) — Provides for an increase in weight limits for sugar cane trucks. This bill has been returned to the calendar, subject to call.

HB 208 (Martin) — Requires a public hearing be held before any rule or regulation requiring a permit, license, or compliance schedule is promulgated regulating a previously unregulated industry or practice relative to environmental quality. This bill is now enrolled.

HB 968 (Martin) — Requires certain steps taken prior to the promulgation of rules, regulations, or permit fees by DEQ which affect the agricultural industry. This bill is now in conference committee.

HB 303 (Holden); SB 411 (Kelly) — Provides for solidary liability of those who cause injury in the storage, handling, or transportation of toxic or hazardous substances. This is the same bad bill that we were successful in stopping last year. HB 303 has been returned to the calender, subject to call, and can be considered dead for the session. SB 411 is dead in committee.

HB 853 (Ater) — Characterizes part-time, seasonal, and construction employees for the purpose of determining benefits for worker's compensation. Several good worker's comp bills have been passed, but this bill would be especially beneficial for sugar. This bill is now enrolled.

SB 17 (Bankston) — Provides for an assessment report of the economic impact of proposed legislation.

(Continued on page 20)

CURRENT SMUT CONDITIONS

by Windell Jackson, Senior Agronomist

After a little dry weather, Dr. Jeff Hoy, Department of Plant Pathology and Crop Physiology, Louisiana Agricultural Experiment Station, Louisiana Agricultural Center, Louisiana State University, Baton Rouge, LA, accompanied by this author made counts to estimate the amount of smut in several fields. Included was the field mentioned in last month's article entitled "More B.S.". The results of these counts and the discussion that took place are subjects of this article.

To determine the amount of smut, ten plots were counted in each of four New Iberia area fields. Three of the four fields were on the same farm. These counts should **not** be considered as a representative sample of the amount of smut found throughout the industry.

Two of the fields counted were planted from the same on-farm seed plot of CP 65-357 KT. In 1990, as plant cane, little smut was observed in either field and both were harvested for sugar in mid-November. One field was next to other cane in which there was smut. The counts in this field indicated that 52% of the shoots were smut infected. In the sister field, which was bordered by fallow land in 1990, 21% of the shoots counted were smut infected. In the fall of 1990, one of the bordering fallow fields was planted with CP 65-357 which came directly from Kleentek. A smut infection of 0.4% was found in this field.

The fourth field counted was first stubble CP 65-357 KT which had **no** on-farm increase. The cane in which the counts were taken was harvested during the last two weeks of December. The grower estimated, "As plant cane this field contained less than 2% smut. Bordering fields also had some smut, but not as much as they do this year." In the plots counted, 63% of the shoots showed smut symptoms.

Data collected by Dr. Hoy and Dr. M.P. Grisham, Research Pathologist Sugarcane Research Unit, Agricultural Research Station, USDA in Houma, LA, indicate that most smut spores do not travel a great distance from their point of origin. This data suggests that most infections will occur within a radius of 60 feet or less from the source of the spores.

In the discussion of this data Dr. Hoy writes, "The spread and increase of sugarcane smut in Louisiana is complex and represents an interaction of environmental factors and cultivar infection characteristics. These experiments suggest that conditions in Louisiana do not favor high rates of disease increase in the smut-susceptible cultivars currently being grown. If the initial incidence of disease is low, then the development of smut epidemics causing significant yield losses in ratoon crops of these cultivars is unlikely."

Dr. Hoy is of the opinion that the amount of smut in susceptible varieties like CP 65-357, CP 74-383 and CP 76-331 can be kept at a manageable level by bordering seed plots of susceptible varieties with varieties that are resistant to smut. If this is possible the useful life of these varieties could be extended for several more years. Also if this is possible, new high-yielding, smut-susceptible varieties that would not be released because of their smut problems could be released to the industry and then maintained in this manner.

Dr. Hoy would like to see a joint effort by personnel from LSU, USDA and

(Continued on page 30)

IN THE FACTORY

Stephen J. Clarke
Audubon Sugar Institute
Louisiana Agricultural Experiment Station

ISSCT WORKSHOP — MATERIAL BALANCES

Last month I reported on my impressions of the annual Congress of the South African Sugar Technologists Association and my visits to several sugar mills in South Africa. The latter part of my visit there was spent at the ISSCT workshop which had the subject of "Factory Performance Monitoring as an Aid to Increasing Productivity". The workshop, held at the Sugar Milling Research Institute in Durban, was very informal and well organized with ample time for discussion between the delegates. The emphasis was upon our understanding and evaluation of factory operations rather than the details of the processes themselves, though of course, it is difficult to separate the two.

Fifteen countries were represented by about seventy-five delegates. As the host country, South Africa was well represented, both numerically and technically, but Australia had only one delegate which was rather a pity since they have so much to contribute. As with the meeting of the previous week, this was an excellent opportunity to get to know face to face people only known up to then by reading of their work.

Most aspects of factory operation were dealt with and the discussions were introduced by different individuals with extensive knowledge of the particular area. Some areas, such as harvesting and transportation, are very much dependent on local circumstances but others, such as cane preparation, may be generalized to all cane operations. On cane preparation the question was not on whether a high level of preparation is necessary but rather on how it is to be achieved and the evaluation criteria. Although several methods for measurement of the degree of cane preparation are available, visual inspection is the most important and useful.

From the standpoint of the Louisiana industry, probably the most important topic that was discussed was the difficulty of obtaining good material balances for the process. This is a combination of the problems of adequate weight and analytical data. The minimum data required for a decent material balance is as follows (this does not include the actual mechanics of the sampling system which is very important but a subject for another time) —

Cane — weighed directly and analyzed for brix, pol and fiber (problems in Louisiana due to cane washing).

Bagasse — weight calculated and analyzed for brix, pol and fiber.

Mixed juice — weighed directly and analyzed for brix, pol and suspended solids. Sucrose determined by gas chromatography or, increasingly, by high performance liquid chromatography on sufficient samples each week to be representative. A pol: sucrose ratio is calculated each week and applied to the pol in mixed juice to calculate the quantity of sucrose entering the process. In South

(Continued on page 22)

Sugarcane Planting Recommendations and Suggestions for Louisiana Sugarcane Producers-1991

The success of a sugarcane farming operation is greatly influenced by a grower's ability to produce good stands of cane in plant, 1st and 2nd year stubble. In order to obtain good yields over the three-year-crop cycle, the grower must establish good stands in his plant cane. The purpose of this paper is to provide sugarcane producers with information that will aid them in making management decisions relative to planting practices that should result in excellent plant cane stands.

The following recommendations are based on actual research results. However when research results are not available, or inconclusive, the most current information is used to make suggestions. The planting information does not include land preparation recommendations. It is assumed that proper land preparation has been carried out and that rows are built up and ready for furrow opening. Recommendations are made on variety selection, furrow width, planting rate, weed control and soil insect control. Suggestions are made on depth of cover, depth of planting and succession planting.

Sugarcane Variety Recommendations for Planting in 1991

The following sugarcane variety recommendations are based on results obtained from research conducted by personnel of the USDA-ARS Sugarcane Research Unit, the American Sugar Cane League and the Louisiana Agricultural Experiment Station. Seven sugarcane varieties are recommended for planting in 1991. Growers should consider these four varieties for major plantings CP 70-321, CP 65-357, CP 74-383 and CP 72-370. LCP 82-89, released in 1990 should be planted to its maximum. The varieties CP 79-318 and CP 76-331 are also recommended, but not for major acreage planting. These varieties have less than desirable harvestability, and growers should consider this when selecting these varieties for planting.

The use of seed cane from a disease-free source, — either heat treated or certified, is recommended. Cane of any variety containing more than 2 percent smut-infected stools should be avoided as a seed source. Seed cane containing less than 2 percent smut-infected stools should be rogued.

Sugarcane varieties with a moderate rating for the sugarcane borer should be monitored more closely than a resistant variety. Moderate varieties, like susceptible varieties, should not be planted where insecticides cannot be applied.

Variety Performance

The variety recommendations consider both the good and less-than-desirable traits of each variety recommended. The following is a brief description of these traits of each of the recommended varieties. (Please note: Additional information in summary form can be found in Table 1.)

Recommended for Major Plantings

CP 70-321 was selected from a cross of CP 61-39 x CP 57-614 and released in 1978. It is the leading commercial variety occupying the greatest percentage of the Louisiana sugarcane acreage. CP 70-321 is early maturing and has

(Continued on page 13)

generally yielded high sugar per acre in first stubble and second stubble on light soils. However, it does not stubble well following a severe freeze or a late spring frost. It is resistant to smut, the sugarcane borer and post-freeze deterioration. CP 70-321 tends to lodge more than CP 65-357 and, when lodged, is more difficult to harvest.

CP 65-357 was selected from a cross of CP 52-68 x CP 53-17 and released in 1973. It has been one of the best accepted commercial sugarcane varieties in Louisiana. It led the state in acreage from 1977 to 1984, inclusive. Planted acreage in this variety has increased in each of the last four years. This is probably because of increased availability and plantings of certified, disease-free seed cane. CP 65-357 is well adapted to mechanical harvesting, matures early and accumulates sucrose until a killing freeze occurs. This variety has above average resistance to post freeze deterioration. CP 65-357 is susceptible to smut, rust and mosaic. It is moderately susceptible to damage by the sugarcane borer. In recent years, CP 65-357 has generally yielded fewer tons of cane and less sugar per acre than most commercial varieties in stubble outfield experiments.

CP 74-383 was selected from a cross of CP 65-357 x L 65-69 and released in 1982. It yields more cane per acre and sugar per acre in second stubble on light soils than CP 70-321. The variety has good harvestability, very good stubbling ability and consistently produces high cane tonnage and good sugar per acre. The disadvantages of CP 74-383 are lower yield of sugar per ton (when compared to CP 70-321), and inconsistent plant cane stands, especially when planted early. It is susceptible to the sugarcane borer, smut and rust. This variety should not be planted in areas where insecticides cannot be applied or where growers cannot carry out a good borer control program.

CP 72-370 was selected from a cross of CP 61-37 x CP 52-68 and released in 1980. It is early maturing, well adapted to mechanical harvesting and has good resistance to smut. This variety should be harvested early for best results. CP 72-379 yields are similar to CP 70-321. It is moderately damaged by the sugarcane borer and is often damaged by late applications of Asulox (after May 15). For this reason growers are cautioned about planting CP 72-370 in areas known to have heavy infestations of johnsongrass.

LCP 82-89 was selected from a cross of CP 52-68 x CP 72-370 and released in 1990. It is well suited to mechanical harvesting and is a good stubbing variety. Field data on both light and heavy soils indicates that LCP 82-89 is superior to CP 70-321 in yield of sugar and cane per acre in plant and stubble crops, and is similar in sugar per ton and maturity. It is moderately susceptible to mosaic and rust. It is considered resistant to smut. RSD has caused significant reduction in cane and sugar per acre yields in the stubble crop of this variety. LCP 82-89 is resistant to the sugarcane borer but may be susceptible to herbicide injury.

Recommended, but not for Major Plantings

CP 79-318 was selected from a cross of CP 65-357 x L 65-69 and released in 1987. In outfield variety tests, CP 79-318 has exceeded CP 70-321 in tons of cane per acre, sugar per ton and sugar per acre on light soils. CP 79-318 is an

(Continued on page 14)

early maturing variety with good stubbling ability, is moderately resistant to smut and is moderately damaged by the sugarcane borer. This variety has shown some resistance to R.S.D. The fact that this variety is brittle and difficult to harvest has limited its acceptance by growers.

CP 76-331 was selected from a cross of CP 65-357 x L 65-69 and released in 1984. It was equal to or exceeded CP 70-321 in yield of sugar per acre in outfield tests. It matures early and produces more sugar per ton than CP 70-321. The variety is highly resistant to the spread of sugarcane mosaic, but has shown susceptibility to smut. CP 76-331 is susceptible to the sugarcane borer and should not be planted in areas where insecticides cannot be applied or where growers cannot carry out a good borer control program. This variety is brittle and difficult to harvest when lodged.

New Variety Release

A new sugarcane variety, LHo 83-153, has been released to growers in 1991. LH0 83-153 is a product of the cross CP 77-405 x CP 74-339. The LHo designate indicates that the variety was selected by LSU personnel at St. Gabriel from the seed produced at Houma, LA by USDA personnel. The variety was jointly developed by the Louisiana Agricultural Experiment Station of the Louisiana State University Agricultural Center, the Agricultural Research Service of the United States Department of Agriculture, and the American Sugar Cane League of the USA, Inc.

LHo 83-153 is a high yielding, good stubbling variety. Data from mechanically harvested outfield trials on both silt loam and clay soils indicate that LHo 83-153 is superior to CP 70-321 in yield of sugar and cane per acre in stubble crops. LHo 83-153 is intermediate between CP 74-383 and CP 70-321 in sugar per ton and maturity, with fiber content similar to CP 65-357. The variety has been assigned a mill factor of 0.992. The variety is generally erect but is less suited to mechanical harvesting than CP 65-357.

The variety is resistant to the spread of the sugarcane mosaic virus in the field. LHo 83-153 is considered moderately resistant to smut and appears resistant to rust under Louisiana field conditions. R.S.D. caused significant reduction in cane and sugar per acre yields in stubble of LHo 83-153. This variety is resistant to the sugarcane borer. Preliminary data suggest LHo 83-153 is tolerant to most herbicides used in sugarcane production.

Seed cane of this variety will be distributed by the American Sugar Cane League in the fall of 1991.

(Continued on page 23)

Liquid Fertilizers
For Sugar Cane

OUACHITA FERTILIZER

NEW IBERIA, LA. (318) 367-8233

SUGAR BULLETIN
WANT ADS
GET RESULTS
(504) 448-3707

ASA
AMERICAN SUGAR ALLIANCE

ARE YOU A MEMBER OF THE AMERICAN SUGAR ALLIANCE?

The American Sugar Alliance is a national coalition of citizens dedicated to supporting domestic sweetener industry. It encompasses beet, cane and corn farmers who produce sugar and corn for sweetener — and also includes thousands of other Americans who work in sugar production and processing as well as in other related industries. We're working hard to assure that farmers and workers in the U.S. sweetener industry service in a world of heavily subsidized sugar.

Join us, won't you? Write or call for information on our individual or corporate memberships.

(202) 457-1437
1225 EYE ST. N.W., Washington, DC 20005

MODEL 1162-H FORD COUNTY

HIGH CLEARANCE
6 CYLINDER DIESEL ENGINE
127 HORSE POWER
11.00 X 16 FRONT TIRES
20.8 X 16 R.I. REAR TIRES
9600 LB LIFT CAPACITY
DELUXE SEAT • ROLL BAR
35 INCH CROP CLEARANCE
GEAR TYPE DROP HOUSINGS

PRICED TO SELL
OUT OF TOWN CALL TOLL FREE

1-800-969-0068

Ford
FORD
NEW HOLLAND

M & L INDUSTRIES INC.

1210 ST. CHARLES ST.	HOUMA, LOUISIANA 70360	504/876-2280
3811 HWY. 90 EAST	BROUSSARD, LOUISIANA 70518	318/837-2763
5810 AIRLINE HWY.	BATON ROUGE, LOUISIANA 70805	504/355-7716

Recommended Rules and Regulations 1991 Sugarcane High Yield Award Program (1990 Crop)

I. Each parish will have its top yielder recognized at the state level.

II. For State Competition:

a. Use total acres of sugarcane grown divided into total sugar produced to give sugar per acre.

b. There is no limit to plant cane acreage.

c. A producer will be reported from the parish where his acreage is reported to ASCS. If a producer reports in more than one parish, he must decide which parish will include him in the top 20 if eligible. His total acreage, regardless of where grown, must be included.

d. To be eligible, winners must have produced 10% more than the state average or at least 4,000 pounds per acre. (State average is about 3,650 pounds per acre.)

e. There will be no districts and only three acreage categories with three finalists in each category.

Category	Acres
I	0 - 100
II	100.1 - 500
III	500.1 - above

f. In addition, the 20 highest producers in the state will be honored. Each parish will send in their top 20 producers when sending in the name of the parish winners. The highest 20 producers across parishes will be selected irregardless of their acreage category and their placing in individual categories.

g. Parishes do not necessarily have to follow the state program for the parish programs.

Can We Continue to Grow Smut Susceptible Varieties?

By **Jeff Hoy and Mike Grisham**

Smut was first observed in 1981 along the Bayou Teche in Southwest Louisiana. Since that time, the disease has spread throughout the sugarcane belt, and farmers have become accustomed to seeing smut whips. Until this year, smut only rarely caused serious yield losses in commercial fields. However, ideal conditions for disease increase occurred during the 1990 growing season and 1990-1991 winter. As a result, we are seeing more smut during 1991 than ever before. Smut infection levels are particularly high in Iberia Parish, and significant yield losses due to smut will occur in numerous fields. The question then arises: Can we continue to grow smut susceptible varieties?

Growing resistant varieties is by far the best method for controlling smut; however, only three of the varieties currently recommended for planting, CP 70-321, CP 72-370, and LCP 82-89, are rated resistant to smut. CP 79-318 and the newly released variety, LHo 83-153, are moderately resistant. The other recommended varieties, CP 65-357, CP 74-383, and CP 76-331, are susceptible. Smut ratings are determined in annual breeding program tests in which stalks of all current and candidate varieties are inoculated with a heavy concentration of smut spores, planted, and observed to determine how high smut infection levels can get in each variety.

The levels of disease occurring in commercial fields of susceptible varieties have been monitored since 1981. In addition, we have conducted studies on disease spread and increase from plant cane through second stubble. The highest rates of smut increase have been observed in CP 65-357 and CP 76-331. However, it appears that, under normal conditions, explosive smut increases are unlikely. Interactions between varieties and environmental factors, of which winter severity is most important, effect the rates of smut increase in Louisiana. For example, in a mild winter, such as the one of 1990-1991, more smut-infected plants survive than during a severe winter. In addition, nearly all of the spread of disease occurs within 10 rows of an infected plant.

Based on the research results, we think the answer to the question, "Can we continue to grow smut susceptible varieties?", is yes, if farmers take steps to control the disease. First, it is important to plant as close to smut-free seed cane as possible. Smut-free cane can be obtained with the heat treatment used to control ratoon stunting disease. Another option is Kleentek seed cane that is inspected and certified by State Department of Agriculture Inspectors to contain less than 0.5% smut. Seed sources should be monitored closely during late May, June, and July. Rogueing of low levels of infection will be worth the effort. The best time for rogueing is during early June. If smut levels exceed 2%, the cane should not be used for seed. Second, it is equally important that potential seed-cane sources of susceptible varieties be planted in fields surrounded by resistant varieties. The isolation of susceptible varieties from smut-infected cane is a practice that also should be followed for cane plantings intended to go to the mill. Many farmers

(Continued on page 35)

(Continued from page 5)

new vision of reality, a new sense of their place in nature. Mankind has hung on through dark millennia of ignorance, disease, torture, starvation, and endless warfare. We are beginning to see the truth about ourselves and to act wisely. I do have faith that we can overcome. In my opinion mankind will not only survive, but will prevail.

Our increased productivity and the application of new technology to problems in the sugarcane industry will have to spill over in the environmental arena of the sugarcane industry. By-products and "waste products" will find new names as "recyclable materials", "soil additives", and "compost aggregates". Some of our flyash is being tested on oil field pits for reclaiming soils. Experimentation with filter cake, flyash, bagasse, and water absorbing crystals could be a new material for golf greens to stabilize color and reduce irrigation.

Scientists at LSU are presently applying for a patent on a pressurized chamber which converts filter cake, under pressure with an infusion of ammonia, to a desirable soil additive with a 6% nitrogen content along with other available nutrients such as potassium and phosphorus.

Audubon Sugar Institute is involved with sugarcane in the environmental area. The general goals and objectives of the Institute are:

— to initiate a long term environmental control project for the sugar factories within the state of Louisiana.

— to enhance the understanding of environmental concerns and needs of the sugar industry.

— to categorize the factories by land and/or water usage and/or cane processed and prioritize them based on environmental problems.

According to scientists at LSU it is estimated that up to six pounds of sugar per ton of sugarcane can be lost into the cane wash water. If cane is to be washed as currently practiced, this type of loss and waste problem cannot be avoided. Nonetheless, chemical treatment of the wash water to maintain pH or reduce odor is unsatisfactory. The best answer will come from good biological control of the pond system. Therefore, our industry will need to evaluate the use of biologically engineered micro-organisms to satisfy the environment.

According to the Hawaiian Sugar Planters' Association, an acre of growing sugarcane produces and releases into the atmosphere 60 tons of oxygen and removes 96 tons of carbon dioxide over a two-year period. When an acre of sugarcane is burned, it adds about 10 to 15 tons of carbon dioxide and a half ton of carbon monoxide into the atmosphere, and consumes about one ton of oxygen during the fire. Sugarcane has the ability to trap and absorb ozone, sulfur dioxide, and carbon monoxide, helping to cleanse the air of these unwanted pollutants. Further, the aesthetic value and the soil conservation sugarcane provides through its growth year round enhances all human beings in the area.

For scientists, the environment has always been viewed as a composite of natural and physical structures exhibiting a complex variety of linkages, although even they did not have a clear understanding of the extent of these relationships until recently. Now average citizens, who once thought of the environment as the "outdoors", that

(Continued on page 19)

(Continued from page 18)

part of their surroundings to be used in the pursuit of fulfillment and enjoyment, are becoming aware that the "environment" is something more than wilderness areas and streams. Rather a significant number of these citizens have also begun to view their total surroundings as a complex ecosystem with a wide range of interrelated plant and animal species existing within a diverse and comprehensive global environment.

The linking of agricultural policy goals and environmental policy aims is certain to be expanded during the next few years.

The Conservation Reserve Program, sodbuster/swampbuster restrictions, the 1990 conservation compliance requirement, and the use of conservation easements in restructuring Farmers Home Administration loans have become a reality for our American farmers.

Despite some problems in the interpretation and implementation of those measures they represent a realistic approach to lessening the potential adverse impact of agriculture on the environment. We all realize that the wetlands issue is of serious concern to Louisiana and Florida. Furthermore, this issue has been over-administered and over-regulated in interpretations coming from Washington. The classical example is of a woman who was fined $10,000 for planting some roses in a wetland area without getting the necessary permit(s).

The climate for debate on environmental issues is headed toward a fever-pitch level. Public concern about the quality of our environment is on the rise. And it's not just environmental groups that are concerned. So are most farm-related organizations and, more importantly, individual farmers. No one knows better than the farmer that issues such as global warming, depletion of the ozone layer, ground water contamination, and pesticide runoff pose problems for future agricultural prosperity. The question frequently asked is; "How can we best minimize any possible harmful effects to the environment from farming.

Most experts agree, that pesticides, when properly used, are safe to both people and the environment. Clearly, pesticides are important tools for American agriculture. But we must be cognizant of any adverse impact they may have on human health or the environment, and we must be prepared to correct those problems.

At the same time food safety concerns are on the rise, the average life expectancy for Americans is also increasing, and now stands at 74.9 years. We must be doing something right!

Referring to the public's concern about the contamination of groundwater, more research is needed, along with integrated pest management and other systems that would minimize any problems from agriculture. Ground water's the hot topic in today's society. It's hardly any feat, with today's sophisticated analytical technology, to find pesticides in groundwater. Generally, the quantities are so small as to be totally inconsequential in terms of health concerns, but still a public bombardeo by media scare stories is concerned that its water is being poisoned. Today parts per quadrillion — 1,000,000,000,000,000 — are being determined. Measured in terms of time,

(Continued on page 20)

UP FRONT WITH THE LEAGUE

(Continued from page 19)

a part per quadrillion is equivalent to one second in 32 million years. New technology is taking us further than we ever thought possible. Even though we can measure it, we simply don't fully understand what it means to ingest one part per billion of a particular residue over the span of 70 years in terms of human health. Is it safe? Is it relevant?

We have to balance the needs of protecting farmer income and insuring an adequate supply of food for domestic!export use; on the other, we must address this growing public concern about environmental quality and health.

Science must work in an environment which is not controlled by media hype and interference. We can't allow policy to move ahead of science nor can we let policy move ahead of common sense.

We must answer the question, "How can we ensure a safe, affordable, and secure supply of food to feed our nation and other nations in the coming century?" It will require an intense effort, with clear insight, and a driving will. We must respond quickly to changing circumstances, taking advantage of change and not being threatened by it. A constructive strategy for coping with the environmental situation may be expressed in a simple slogan — the TANSTAAFL principle: There Ain't No Such Thing As A Free Lunch. This is closely related to the fundamental theorem of ecological economics, that everything depends on everything else. Or, behind every free lunch there is a hidden cost to be accounted for.

"If we can go to the moon, why can't we eliminate pollution?" This rhetorical question invites a rhetorical response: "If physical scientists and engineers approached their tasks with the same kind of wishful thinking and fuzzy moralizing which characterizes much of the pollution discussion, we would never have gotten off the ground." Solving the pollution problem is no easier than going to the moon, and therefore requires a comparable effort in terms of people and resources and the same sort of logical hard-headedness that made Apollo a success. Social scientists, politicians, and journalists who spend their time crying to find someone to blame, searching for a magic device or regulation, or complaining about human nature, will be as helpful in solving the pollution problem as they were in getting us to the moon.

Williams Jennings Bryan said it best a century ago, "Destiny is not a matter of chance, it's a matter of choice. It's not something to wait for, it's something to work for."

Nonetheless, in simple terms, despite all our accomplishments, man owes his existence to a six-inch layer of topsoil and the fact that it rains.

THE BATON ROUGE LINE

(Continued from page 9)

This bill is important because fiscal notes would be prepared for the impact in business. This bill has been withdrawn.

HB 505 (Ater); SB 169 (Hainkel) — Provides for the computation of damages and elements of proof in certain tort claims. These bills would eliminate strict liability in Louisiana. Both of these bills are dead in committee.

will assist Secretary Madigan in supervising the work of the entire department. Veneman has served as Deputy Under Secretary for International affairs since June, 1989, and was responsible for all the department's international issues, including trade policy, trade negotiations and food aid. Replacing Veneman will be Joe O'Mara, who, until this appointment, was the U.S. Geneva-based GATT negotiator. Though O'Mara's title will be changed to allow him to retain his career status, his responsibilities will be the same as if he were Deputy Under Secretary.

COTTON, RICE AND SUGAR SUBCOMMITTEE APPROVED TECHNICAL AMENDMENTS

On Wednesday, June 26, 1991, Chairman Jerry Huckaby's (D-LA) Cotton, Rice and Sugar Subcommittee approved a series of technical amendments designed to clarify provisions in the 1990 farm act. The legislation primarily affects the cotton, rice and sugar programs operated by the USDA. Changes approved by the Subcommittee which affect the sugar industry include requiring the USDA to annually publish the basic loan rates for beet sugar and cane sugar. Another change would allow sugar from sugarcane harvested during the last 3 months of the fiscal year to be eligible for the supplementary nonrecourse loans made available in the 1990 farm act for sugar beets. The legislation also directs ASCS county committees to increase individual crop acreage bases for the 1992-1995 crops for those producers who were forced to reduce base in 1991 to meet the requirement that total base not exceed available cropland. This provision would restore them to the same level as the total of crop acreage bases that existed on the farm for 1990. In addition, the USDA is required to provide for a reasonable amount of carry-over stocks when estimating the amount of sugar available for consumption in the United States each year. This is an important consideration that must figure into total sugar availability if the USDA deems marketing allotments are to be triggered.

These technical amendments have been submitted to the full Agriculture Committee and await further approval before becoming part of the 1990 farm act. The amendment is expected to be approved by the full House and Senate before Congress adjourns for its August recess. We will keep the League posted on future discussions.

ATTENTION

ALLEE, ALLEE & ALLEN

Announces Its

Precision Grading Service
Lazerplane Equipped

★ Better drainage
★ Better weed control
★ Increase acreage

Also Agent for
Spectro Physics
Laser Plane Sale

St. James, Louisiana 70086
(504) 265-3965

(Continued from page 11)

Africa this ratio varies from 0.97 to 1.00 depending on the season and the quantities of glucose and fructose.

This ratio is not measured for filter cake or bagasse since the sucrose levels are low in both and the correction would not have a significant impact upon the overall balance. At the high levels of mill extraction achieved (usually higher than 98%) the sucrose loss in bagasse is much smaller than in molasses, whereas they are about the same in Louisiana. For these samples the ration is assumed to be 1.00 for the purpose of calculation of the mass balance.

Filter cake — weighed directly and analyzed for pol and moisture.

Sugar — weighed directly or by bag count and analyzed for pol and moisture. Pol and sucrose are assumed to be the same in this case since the quantity of material that would interfere in pol measurement is very small.

Molasses — weighed directly and analyzed for brix and pol. The pol: sucrose ratio is also measured for the molasses and used to correct the pol readings to give values closer to the actual sucrose content. This ratio varies from about 0.79 to 1.00 depending on the season and the mill. Other measurements include invert and ash for calculation of boiling house performance but these are not used for the mass balance.

The undetermined loss is used to close the balance and comes out quite differently if the pol is used rather than the sucrose. For example the undetermined loss (% pol in cane) increased from 1.51 to 2.30, from 1.76 to 2.00 and from 1.39 to 2.65 at three mills but decreased from 1.85 to 1.55 at a fourth mill. The major charge is in the composition of molasses. If (when) good juice weighing systems are introduced in Louisiana, it will be necessary to perform the analyses necessary for good sucrose data in order to obtain useful material balances.

The value of solids (brix) balances were discussed but the loss of solids in process and the inherent errors in brix measurement were thought to be such that detailed calculations based on these were of limited value. Both losses and production of invert in process are significant and invert balances are therefore very difficult to obtain and would in any case be hard to interpret.

Even the determination of the sucrose loss by inversion during evaporation becomes difficult unless special and precise techniques are used. For example, if 0.5% inversion takes place the sucrose % brix (purity) changes only very slightly and cannot be measured satisfactorily and the determination of glucose % sucrose by chromatography is necessary. The current limit of this technique is 0.2% inversion and it cannot be used at the backend of the factory due to the inevitable thermochemical loss of glucose. There was considerable discussion of the factors affecting sucrose and invert loss and significant work has been done on simple systems. However, the detailed scientific investigation of what actually happens in a raw sugar factory is only beginning.

Sugarcane Planting Recommendations *(Continued from page 14)*

Table 1. Characteristics for recommended sugarcane varieties.

Varietal Characteristics	VARIETY							
	CP 65-357	CP 70-321	CP 72-370	CP 74-383	CP 76-331	CP 79-318	LCP 82-89	LHo 83-153
Year Release	1973	1978	1980	1982	1984	1987	1990	1991
Harvestability	G	M	G	G	P-M	P-M	G	M
Erectness	G	P-M	G	VG	M	M	G	G
Brittleness	G	M	G	G	M-P	P	G	M
Sucrose	G	G	G	M	VG	G	G	G
Maturity	E	E	VE	M	VE	E	E	M
Fiber	M	G	M	G	M	M	M	M
Tonnage	G	G	M	VG	G	G	VG	G
Stubbling	M	M	M	VG	G	VG	G	VG
Borer Resistance	M(T)	R	M	S	S	M	R	R
Smut Resistance	S	R	R	S	S	MR	R	MR
Mosaic Resistance	S	M	S	M	R	M	MS	R
RSD Tolerance	M	P	M	M	M	G	P	P
Rust Resistance	M	R	R	M	R	R	M	R
Post Freeze Deterioration	G	VG	M	M	M	M-P	M-P[1]	—
Herbicide Tolerance	M-G	M-G	M[2]	G	M-G	G	M	G
Shading	G	G	P	G	G	G	G	G
Soil Type	All	All	All	All	All	All	All	All
Ripener Response	G	G	VG	M	G	G	—	—

VG = Very Good
G = Good
M = Moderate, Medium
P = Poor
VE = Very Early

R = Resistant
S = Susceptible
MR = Moderately Resistant
E = Early
T = Tolerant

All = Both Light and Heavy Soil Types

[1] Following 8° F freeze December 22-25, 1989.

[2] Susceptible to asulox injury.

Sugarcane Variety Census

The annual sugarcane variety census is conducted cooperatively by the Louisiana Cooperative Extension Service and the USDA-ARS Sugarcane Research Unit. The variety survey was conducted in 1990, but because of the damage to the 1990 crop from the 1989 freeze, the survey may not truly express the evaluation of varieties by growers but rather a report of cane that survived the winter. A better understanding of variety evaluation by growers can be

(Continued on page 24)

seen in a comparison of several years of variety surveys. Table 2 shows the 1986-1990 variety surveys as compiled and reported by agricultural agents in the 17 sugarcane producing parishes of Louisiana. This chart shows that CP 70-321 has been and continues to be the leading variety grown in the state. Although it has maintained a high level, this level has been constant and has not increased. CP 65-357 is the second leading variety in the state and has increased in acreage during the last three years. Of the two other major varieties, CP 72-370 has remained constant while CP 74-383 does show some reduction in the five-year comparison. All the varieties in Table 2, with the exception of CP 70-330, and CP 72-356 are recommended for planting in 1991.

Table 2. Louisiana Sugarcane Variety Survey, 1986-90[1]

Variety	% of State Total by Year					5-Year Change
	1986	1987	1988	1989	1990	
CP 65-357	24	22	25	28	35	+11
CP 70-321	41	42	43	41	39	− 2
CP 70-330	4	3	1	1	—	− 4
CP 72-356	9	6	5	4	2	− 7
CP 72-370	9	9	9	10	10	+ 1
CP 74-383	9	11	10	8	6	− 3
CP 76-331	2	4	5	5	3	+ 1
CP 79-318	—	—	1	2	4	+ 4
Others	2	3	1	1	1	− 1
	100	100	100	100	100	

[1] Prepared by Dalton P. Landry, county agent and coordinator (Extension Sugarcane Educational Programs), Louisiana Cooperative Extension Service, from variety survey reports by county agents in sugarcane producing parishes 1986-90.

(Continued on page 25)

CANE TRACTOR PARTS

We ship & locate parts nationwide.

New. Used and Rebuilt Hi Crop and Row Crop Tractor Parts. Tires. Rebuilt Clutches, Crank Shafts. Injector Pumps and More. Also Any Hard-To-Find Parts. We Buy Farm Equipment & Salvage Tractors.

SAVE 50% & More!

CANE TRACTOR PARTS

Toll Free 1-800-738-2263 Hwy. 90

(318) 276-3453 (318) 276-6230 Jeanerette, LA

Planting Recommendations and Suggestions

Planting Furrow Width: Experiments comparing various furrow types and width have been conducted by LSU researchers for many years. Table 3 shows a summary of the research data as an average of those varieties now grown in the state.

Table 3. Effect of Planting Furrow Width on Sugarcane Yields, 6 ft. Rows[1]

	Furrow Width		
	V-Furrow	15-18"[2]	24"[3]
Plant Cane			
1977-88 av.	**37.3 T/A[4]**	**41.2 T/A (+3.9)**	**42.2 T/A (+1.0)**
	7139 S/A[5]	**7886 S/A (+747)**	**8163 S/A (+277)**
.1st Stubble			
1980-89 av.	**33.4 T/A**	**35.5 T/A (+2.1)**	**35.8 T/A (+.3)**
	6560 S/A	**6903 S/A (+343)**	**7018 S/A (+115)**
2nd Stubble			
1985 av.	**31.3 T/A**	**32.3 T/A (+1.0)**	**32.2 T/A (−.1)**
	5648 S/A	**5873 S/A (+225)**	**5783 S/A (−90)**

[1] 1977-89, Dr. Ray Ricaud and associates.
[2] Numbers in parentheses indicate a comparison with V-Furrow.
[3] Numbers in parentheses indicate a comparison with 15-18" Furrow Width.
[4] T/A = yield of cane/acre in tons.
[5] S/A = yield of sugar/acre (TRS) in pounds.

This research shows good yield increases (number in parentheses) in tonnage and sugar per acre from the *V. Furrow* to the *15-18" Furrow,* but much less increase from the *15-18" Furrow* to the *24" Furrow* in plant cane and 1st stubble and a decrease in 2nd stubble. Therefore, based on this research and from observations and conclusions by growers using the wider furrow openings, it is suggested and recommended that growers use a 15" to 18" width furrow for planting in 1991.

It is further suggested that the furrow opener be constructed to leave a wide bottom with a slight indentation on each side of the furrow and a slight ridge of loose soil in the middle of the furrow bottom. This opening configuration can be obtained by attaching a single disk on each side of the row opener to dig out the furrow sides and deposit the soil in the furrow middle. County agents in sugarcane producing parishes have available pictures and blueprints of a suggested row opener.

Some growers have found that packing rows ahead of opening will give a more uniform furrow when opening with a three-row opener.

Planting Rate: Table 4 shows a summary of the research conducted at LSU on planting rate. The research reported since 1985 was conducted with the varieties now grown in the state.

(Continued on page 26)

Sugarcane Planting Recommendations *(Continued from page 25)*

Table 4. Effect of Rate of Planting on Sugarcane Yields, 6 ft. Rows[1]

	Planting Rate		
	2 Stalks	3 Stalks[2]	4 Stalks[2]
Plant Cane 1971-74	33.5 T/A[3] 6483 S/A[4]	35.9 T/A (+2.4) 7059 S/A (+576)	36.6 T/A (+3.1) 7178 S/A (+695)
Plant Cane 1985-88	43.1 T/A 8650 S/A	— —	45.4 T/A (+2.3) 9194 S/A (+544)
Plant CP 70-321, CP 70-321K CP 72-370, CP 72-370K 1989[5]	26.3 T/A 5099 S/A	26.8 T/A (+.5) 5231 S/A (+132)	28.5 T/A (+2.2) 5548 S/A (+449)
First Stubble 1973	28.6 T/A 5494 S/A	30.4 T/A (+1.8) 5808 S/A (+314)	30.2 T/A (+1.6) 5751 S/A (+257)
First Stubble 1986-89	35.3 T/A 7402 S/A	— —	37.2 T/A (+1.9) 7764 S/A (+362)

[1] 1971-1989, Dr. Ray Ricaud and associates.
[2] Numbers in parentheses indicates increase in yield when compared to two stalk planting rate.
[3] T/A = yield of cane per acre in tons.
[4] S/A = yield of sugar per acre (TRS) in pounds.
[5] Response was for one year only.

It is generally understood that when selecting sugarcane for research on planting rate, researchers use only good, mature stalks free from disease, insect or mechanical damage. Growers should also plant the best seed cane available.

The recommended rate in the past has been three (3) continuous stalks plus a 10% lap. Based on the research results shown in Table 4 and field observations, the planting rate recommendation for 1991 will continue to be three (3) stalks and a lap, however, the lap should be of at least two (2) mature joints. Where sufficient seed cane is not available, growers can obtain good stands by planting two (2) stalks and a lap of at least two (2) mature joints. These recommendations are based on good seed cane being used. Additional seed cane should be used to compensate for poor quality seed cane. Planted cane should be spread so as to cover the entire width of the planting furrow.

Amount of Cover Over Seed Cane

There has been much discussion, especially following the 1989 freeze, as to how much soil should be put over cane at planting time. Although there have been result demonstrations on this subject in the past, replicated research in

(Continued on page 27)

Louisiana is not available on cane cover. There are many opinions on the subject. After discussion with industry leaders, researchers, county agents, producers and from printed information made available by specialists in the past, the following suggestions are made as to amount of cover over cane.

Heat treated cane should be covered with 2" of packed soil. After the cane is up to a good stand and before freezing weather occurs, add an additional 2" of soil to protect from freeze damage. Do not cover heat treated cane with more than 2" of packed soil at planting.

For regular late August, September and October planting, cover with 3" to 4" of packed soil at planting time. Although farmers in the southern part of the belt can normally get by with a 3" pack soil covering, on farms in the northern part of the sugar belt the 4" packed soil may be a better suggestion. Growers who cover with more than 4" of packed soil should be prepared to remove the additional soil in the spring.

Growers should use a covering tool that will cover the cane without pulling the cane closer than the width it was planted. County agents in the sugarcane producing parishes have pictures and blueprints available of a covering tool that does a good job of covering without squeezing the cane together. *Packing of rows should be done immediately after covering. Clean quarter drain before spraying herbicide.* In those soils that erode and soil washing occurs in the fall before a hard freeze, it is suggested that the middles be sunk and rows rebuilt so as to allow winter protection for the cane.

Depth of Planting with Relation to Water Furrow

Depth of planting as related to water furrow depends on the internal drainage and sometimes external drainage of the soil where cane is being planted. It is suggested that seed cane be placed so as to be at least two inches above the original water furrow or middle. In soils with poor internal drainage, the seed cane should be placed higher above the original water furrow or middle level than in those soils with good internal drainage.

Growers should be aware of the need to keep the seed cane above the area where water levels will hurt cane stands.

Weed Control at Planting

(From Louisiana Cooperative Extension Service Publication No. 2314, Controlling Weeds in Sugarcane.)

Herbicides to control weeds, especially johnsongrass seedlings, are essential to prevent weed competition and losses in sugarcane production. Unless herbicides are applied soon after planting, johnsongrass and other weed seed remaining in the soil following a fallow program will germinate, producing a mature plant with viable seeds and/or rhizomes before the first frost. As a result, grasses, especially johnsongrass, will quickly reinfest a field.

The selection of herbicides should be based on soil texture, organic matter content, weed problem and the variety of sugarcane. If for some reason preemergence herbicides cannot be applied immediately after planting, they should be applied at the earliest possible time.

The following tables illustrate weed control programs for sugarcane at planting in Louisiana.

(Continued on page 28)

A. Preemergence Control of Johnsongrass Seedlings and Winter Weeds

Herbicide	Soil Type — Light Soil	Medium Soil	Heavy Soil
	Rate/A (30" Band)		
Sencor/ Lexone 4L	1.5 pts.	1.5 pts.	1.5 pts.
Sencor/ Lexone DF	1.0 lb.	1.0 lb.	1.0 lb.
Sinbar 80W*	.66 lb.	.66 lb.**	.75 lb.

* Do not apply Sinbar on the variety CP 48-103, on soils with less than 1% organic matter, or on soils that have shown previous Sinbar injury.

** Use .75 lb. where heavy johnsongrass infestations are expected.

B. Preemergence Control of Itchgrass (August Planted Cane Only)

Apply Treflan, Trifluralin or Trilin at 1.7 pts./A (all soil types) and incorporate immediately into the soil to a depth of about 2 inches but above the cane seed pieces. Additional herbicidal treatments should be applied to control winter weeds (Section D).

Note: Treflan will also effectively control browntop panicum and seedling johnsongrass.

C. Preemergence Control of Annual Summer and Winter Weeds

The following herbicides control most annual grasses and broadleaf weeds, but may not control johnsongrass, itchgrass or browntop panicum.

Herbicide	All Soil Types — Rate/A (30" band)
AAtrex 80W	1.5 lbs.
Atrazine 80W	1.5 lbs.
Princep 80W	1.5 lbs.
Cotoran 80W	1.5 lbs.
Karmex 80WP	1.5 lbs.
AAtrex 4L	1.2 qts.
Atrazine 4L	1.2 qts.
Princep 4L	1.2 qts.
AAtrex Nine-O	1.33 lbs.

D. Alternate Procedure for August Planted and/or Heat Treated Sugarcane

Generally early planted cane and heat treated cane are lightly covered (2 inches of packed soil). Additional soil should be added after the cane is up to a good stand. Where additional soil is added, two applications of a herbicide may be needed.

The first treatment after planting should be with one of the herbicides in this guide at the lowest rate suggested. For the second treatment, after additional soil is added, apply AAtrex 80W at 1.2 lbs., or Atrazine 4L at 1.0 qt., or AAtrex Nine-O at 1.1 lb.

E. Supplemental Practices

1. After herbicides are applied to the drill, cultivate the sides of the row to control weeds.
2. Rogue escaped rhizome johnsongrass plants.
3. Escaped johnsongrass may be spot treated with Asulox at 6-12 pt. of Asulox in 100 gallons of water. Add .25% nonionic surfactant or 1.0% crop oil concentrate.

(Continued on page 30)

CLASSIFIED

FOR SALE: 1988 Cameco 2-row Harvestor John Deere engine, factory cab and air, 791 hours split system. Call (318) 364-8903 day, (318) 365-5036 night.

FOR SALE: JD 1650 Tractor. JD 2030 Diesel 60 HP Tractor, JD 2040 with Loader & Bushhog, JD 4020 Hi-Crop Tractor, IH 1066 Hi-Crop, I-H 244 Diesel 22 HP Tractor, IH 284 Gas Tractor, Oliver 1950 T Row-Crop Tractor, 40 Ft. Rayne Plane Landleveler, 1630 JD Choppers, 17 Ft. Wide. Call (318) 276-3453.

WANTED: Tractors for Salvage, any make, age or condition, Running or Not. Also want to buy Hi-crop Tractors. Call 1-800-738-2263.

WANTED: Large Cane Grapple for Transloader. I also want small sugar kettles, need a measurement across. Will pay up to $100 per kettle. Call (504) 369-2265 Day, (504) 369-6645 Night.

FOR SALE: JD Hi-Clearance 4430 Power Shift; 4230, 4010 Hi-Crop; 1066 AC D17 Land Level 40 ft. long; 2 JD 3 row Hoppers; Amco Hipper 6 row; 12 ft. Grader Blade. New Clippers, Box Scrappers, Blades and Choppers. Call Grady Dugas, St. Martinville (Parks), LA (318) 845-4774.

Weed Control for Cane Cut for Seed

A. Control of Johnsongrass and Annual Weeds in Cane Cut for Seed and Early Harvested Cane

1. *Preemergence*

Herbicide	Soil Type — Light Soil	Medium Soil	Heavy Soil
	Rate/A (30" Band)		
Sencor/ Lexone 4L	1.5 pts.	1.5 pts.	1.5 pts.
Sencor/ Lexone DF	1.0 lb.	1.0 lb.	1.0 lb.
Sinbar 80W*	.66 lb.	.66 lb.**	.75 lb.

* Do not apply Sinbar on the variety CP 48-103, on soils with less than 1% organic matter, or on soils that have shown previous Sinbar injury.

** Use .75 lb. where heavy johnsongrass infestations are expected.

2. *Postemergence (johnsongrass or itchgrass)*

Apply Asulox at 2.0 qts/A (36 inch band) plus .25 to .50 percent non-ionic surfactant or 1.0 percent crop oil concentrate by volume to 18-inch johnsongrass or 6-inch itchgrass. For spot treatment, turn boom on and off as necessary.

B. Control of Winter Annual Weeds

Control winter weeds to free emerging cane from weed competition and to provide a clean row for the application of preemergence herbicides in the spring.

1. *Chemical Removal*

Preemergence herbicides should be applied in the fall or winter.

a. Preemergence*

Herbicide	Rate/A (36" band)
Atrazine 80W	1.25 lbs.
Atrazine 4L	1.0 lbs.

* Use of preemergence herbicides may eliminate the need to remove large winter weeds in the spring with phenoxy herbicides.

(Continued on page 31)

CURRENT SMUT CONDITIONS

(Continued from page 10)

the League to monitor the spread of smut in fields of susceptible varieties and to test the feasibility of isolating seed plots of these varieties. He has asked the two League agronomists for help in locating farms on which to conduct the survey and for their assistance in making the counts of smut at these locations.

It should be pointed out that the amount of smut found in cane fields this year is not normal. The high amount of smut is due to environmental conditions of last year. The dry fall let spores build up in the soil and on cane. Also the mild winter did not kill many of the eyes that were near the soil surface nor infected smut stools. Data has shown that smut-infected stools are more easily killed by winter freezes than are healthy stools. Because this is a reaction to environmental conditions and not a change in the race of smut or a change in the susceptibility of varieties to smut, growers should continue planting the varieties they normally plant.

Table 5. Proportionate Rates of Herbicides Per Acre of Sugarcane for Various Band and/or Row Widths

Rate of Formulated Herbicide Product Per Acre in Pounds, Pints, Quarts					
72-inch rows			66-inch rows		
30-inch band	36-inch band	Broadcast	30-inch band	36-inch band	Broadcast
0.66 (⅔)	0.80	1.60	0.73	0.87	1.60
0.75 (¾)	0.90	1.80	0.82	0.98	1.80
0.80	0.96	1.92	0.87	1.04	1.92
1.00	1.20	2.40	1.10	1.31	2.40
1.33	1.60	3.20	1.50	1.80	3.30
1.50	1.80	3.60	1.64	1.96	3.60
1.66	2.00	3.98	1.81	2.17	3.98
2.00	2.40	4.80	2.18	2.62	4.80
3.00	3.60	7.20	3.27	3.93	7.20
4.00	4.80	9.60	4.36	5.24	9.60

★★

FOLLOW LABEL DIRECTIONS

If herbicides are handled or applied improperly, or if unused portions are not disposed of safely, they may be injurious to humans, domestic animals, desirable plants and fish or other wildlife, and may contaminate water supplies. Use herbicides only when needed, and handle them with care. Follow the directions, and heed all precautions on the container label.

★★

Expected Weed Control

Table 6 lists expected degree of weed control that should be obtained with a specific herbicide(s) on selected weeds under average conditions. Many factors such as soil texture, moisture, temperature and the extent to which the herbicide spray covers the weeds will affect the results obtained. These estimates are derived from research and experience. This information may help you to develop the most effective control program for the weeds on your farm.

(Continued on page 32)

Table 6. Expected Weed Control of Specific Herbicides on Selected Weed Species.

Herbicides	Seedling Johnsongrass	Rhizome Johnsongrass	Itchgrass	Bermudagrass	Browntop Panicum	Annual Grasses	Morningglory	Winter Grasses	Winter Broadleaf Weeds	Other Broadleaf Weeds
Planted Fields										
Preemergence										
Sinbar	G-E	P	P	P	P	E	G-E	G	E	G-E
Sencor/Lexone	G-E	P	P	P	F-G	E	G-E	G	E	E
Treflan	E	P	G-E	P	G-E	E	P	G	P	P
Atrazine*	P	P	P	P	P	G-E	E	G	E	E
Postemergence										
Atrazine	P	P	P	P	P	P-F	F	F	G	F-G
Asulox	G	G	P-F	P	G	G	P	F-G	P	P

* Includes Karmex, Cotoran, Princep

Control Rating Scale

Poor = less than 49%
Fair = 50-69%
Good = 70-89%
Excellent = 90-100%

Succession Planting Sugarcane (cane planted without fallow)

This information on succession planting of sugarcane should not be regarded as a recommendation, but taken only as information if growers include succession planting in their rotation. The research on succession planting is continuing at the Louisiana Agricultural Research Station at St. Gabriel. Dr. Ray Ricaud has conducted this research for several years and has made available the results of the research. Of particular interest is the good yield increase response he has obtained by the addition of a complete fertilizer (90-90-90) at planting time in the

(Continued on page 33)

planting furrow of succession cane. The yield increases, when comparing fertilized vs. non-fertilized succession cane at planting, were substantial not only in plant cane but also in 1st and 2nd year stubble. (The increase in the three-year cane cycle was 17.0 tons when fertilizer was used at planting.)

Although planting succession cane is not a recommended practice, many growers, for a number of reasons, have done succession planting in the past and will do succession planting in the future. However, since some growers will be doing succession planting it is felt that providing them with the best information now available, as a suggestion, would be of help. Therefore, the following are suggestions on the procedures to use in doing succession planting.

Suggested Procedure for Succession Planting Sugarcane

(Please note: Growers should select for succession planting areas that do not have heavy Johnsongrass on bermudagrass infestations.)

1. Shave stubble deep. This will divide the stubble being plowed into smaller more manageable pieces.
2. Roto-till rows.
3. Subsoil in each row.
4. Rebuild rows with disk chopper.
5. Culti-pack and then open planting furrow 15" to 18" as recommended.
6. Apply fertilizer in planting furrow. *Note:* Dr. Ricaud has tested only 90-90-90 fertilizer and obtained good response. It is generally felt that the P&K are the fertilizer elements most needed, however, this has not been proven through research. (Experiments and result demonstrations on rates and types of fertilizer for succession planting are being conducted in 1991.) The use of fertilizer at planting time in succession cane is in addition to the normal recommended fertilizer in the spring.
7. Plant seed cane and cover as recommended.
8. Pack rows after planting.
9. Clean quarter drains.
10. Apply preemergence herbicides as recommended.

Soil Insect Control at Planting Time

(Reprinted from Louisiana Cooperative Extension Publication No. 1982, Pest Management of Sugarcane Insects.)

Only two crop conditions require use of a soil insecticide in Louisiana sugarcane fields. These are:

(a) When pasture, turf or grass infected land is brought into cane productions for the first time or after being out of cane production for several years. There are usually enough grubs or wireworms already established in this type of land to warrant a preventive application of insecticide at cane planting time. However, a soil insecticide application is not needed with the second plant cane crop if the field has been kept reasonably free of grass during the entire crop cycle.

(b) When cane fields are extremely grassy and particularly when cane is planted in a field that was not kept free of heavy grass infestation when fallow. Ongoing wireworm and white grub infestations will persist in grassy fields.

Growers with fields similar to the ones described above should

(Continued on page 34)

consider control measure for soil insects at planting time. County agents have recommendations on soil insect control.

Growers should be ever mindful of those practices that they can use to decrease the possibility of soil insect damage. The key to successful management of most soil insect problems in Louisiana sugarcane fields is to plant healthy seed cane in well-drained land that is free of weeds and kept weed-free as much as possible during the ratoon crops.

Sugarcane producers who would like additional information on the practices covered in this paper should contact their county agents.

Prepared by Dalton P. Landry, county agent and coordinator (Sugarcane Educational Programs). This information was obtained from research data by scientists at the Louisiana Agricultural Experiment Station, the USDA-ARS Sugarcane Research Unit and the American Sugar Cane League agronomists with consultation by Louisiana Cooperative Extention specialists in weed science and entomology and county agents in sugarcane producing parishes. Growers' comments were included.

Louisiana State University Agricultural Center, H. Rouse Caffey, Chancellor
Louisiana Cooperative Extension Service, Denver T. Loupe, Vice Chancellor and Director
Issued in furtherance of Cooperative Extension Service work, Acts of Congress of May 8 and June 30, 1914, in cooperation with the United States Department of Agriculture. The Louisiana Cooperative Extension Service follows a nondiscriminatory policy in programs and employment.

GOODYEAR

SPECIAL
SURE-GRIP TD-8

GOODYEAR TIRES FOR YOUR CAR, TRUCK, FARM OR OFF HWY. EQUIPMENT

- 24 HR. ROAD SERVICE
- COMPLETE AUTOMOTIVE CERTIFIED SERVICE
- TRUCK TIRE BALANCE AND ALIGNMENT

NOBODY FITS YOU LIKE GOODYEAR

SUPER TRACTION • SUPER STRENGTH

GENERAL ELECTRIC AUTHORIZED DEALER

7:30 AM - 6:00 PM MON. - FRI.
7:30 AM - 1:00 PM SAT
1203 ST. PATRICK HWY
THIBODAUX

PIT STOP
YOUR ON FARM SERVICE SPECIALIST

GOODYEAR AUTO SERVICE CENTER
1-800-256-1269 (504) 447-2696

Smut Susceptible Varieties *(Continued from page 17)*

like to keep all of their acreage of a variety together. However, this practice will lead to trouble when planting a smut-susceptible variety. If clean seed sources are planted in locations bordered on any side by smut-infected cane, high numbers of spores will be deposited on the cane as it grows, and the effort and expense involved in obtaining smut-free cane will be wasted. Heat-treated cane and Kleentek cane of susceptible varieties will become reinfected, so it is important to establish a clean seed source every year. On farms with a smut problem, one or at most two increases is all that you can expect to get from heat-treated or Kleentek seed.

In tropical areas, the appearance of smut has usually resulted in the immediate replacement of susceptible varieties with whatever resistant varieties were available. In Louisiana, we have been able to continue to grow susceptible varieties, such as CP 65-357 and CP 74-383, until the breeding program can select and release resistant varieties that are agronomically equal or superior to the currently grown varieties. It is hoped that as new varieties are released they will perform well enough to allow growers to replace the smut-susceptible varieties.

Most farmers are growing smut-susceptible varieties on at least a portion of their acreage, and most have now seen some smut whips in their fields. Until this year, rates of disease increase have been low, and a sense of complacency about smut may have developed. The disease first occurred in Iberia and Vermillion Parishes, and it is well established there. The situation this year in Iberia Parish provides a warning to the rest of the industry that smut cannot be ignored. To prevent a similar build-up of smut in susceptible varieties in other areas, a clean seed program should be used. In addition, seed sources and, as much as possible, cane for the mill should be surrounded by resistant varieties.

---

* Jeff Hoy is a Plant Pathologist in the Department of Plant Pathology and Crop Physiology, Louisiana Agricultural Experiment Station, Louisiana State University Agricultural Center in Baton Rouge, and Mike Grisham is a Plant Pathologist with the Sugarcane Research Unit, Agricultural Research Service, United States Department of Agriculture in Houma.

** Mention of a trademark or proprietary product does not constitute a guarantee or warranty of the product by the U. S. Department of Agriculture, and does not imply its approval to the exclusion of their products that may also be suitable.

THE SUGAR BULLETIN

206 E. Bayou Rd.
Thibodaux, LA 70301

(504) 448-3707

Commercial Members of the
AMERICAN SUGAR CANE LEAGUE
OF THE U.S.A., INC.

ASSUMPTION BANK & TRUST CO.
P.O. Box 398 Napoleonville, LA 70390

THE CROPMATE COMPANY
Fertilizer Region
P.O. Box 28 Thibodaux, LA 70302

CAMECO INDUSTRIES, INC.
P.O. Box 968 Thibodaux, LA 70302

FIRST COMMERCIAL BANK
521 Main St. Franklin, LA 70538

DUPLANTIER, HRAPMANN,
HOGAN, & MAHER
Certified Public Accountants
821 Gravier Suite 1300
New Orleans, Louisiana 70112

ESTES REFRACTORY
P.O. Box 94 Jeanerette, LA 70544

THE FIRST NATIONAL BANK
IN DONALDSONVILLE
P.O. BOX 108 Donaldsonville, LA 70346

GULF ENGINEERS & CONSULTANTS, INC.
535 Main Street
Baton Rouge, LA 70802

WESTWAY TRADING CORP.
228 St. Charles Ave., Suite 700
New Orleans, LA 70130

NADLER, INC.
P.O. Box 359
Plaquemine, LA 70765

NATIONAL BANK
FOR COOPERATIVES
Jackson Region
1800E, County Line Road
P.O. Box 16099
Jackson, MS 39236

OUACHITA FERTILIZER
Route 7, Box 49-F
New Iberia, LA 70560

DRAVO LIME COMPANY
Pelican State Division
12797 Scenic Highway
Baton Rouge, LA 70807

SELF INSURANCE ADMINISTRATORS
P.O. Box 11509
New Iberia, LA 70562-1509
A Member Company of Huval Insurance Group

FIRST SOUTH PCA
P.O. Box 667 Thibodaux, LA 70302
P.O. Box 10908 New Iberia, LA 70562

STANDARD SUPPLY & HARDWARE
CO., INC.
P.O. Box 60620 New Orleans, LA 70160

ST. MARY BANK & TRUST CO.
Franklin, LA 70538

LOUISIANA CANE MFG., INC.
P.O. Box 71 Thibodaux, LA 70301

WHITNEY NATIONAL BANK
228 St. Charles Avenue
New Orleans, LA 70130

3-D CHEMICAL, INC.
P.O. Box 607
St. Martinville, LA. 70582

J.I. CASE
P.O. Box 171818
Memphis, TN 38187-1818

M&L INDUSTRIES
1210 St. Charles St. Houma, LA 70360
3811 Hwy. 90 East Broussard, LA 70518
5810 Airline Hwy. Baton Rouge, LA 70805

BROUSSARD, BUSH & HURST, INC.
11764 Haymarket Dr.
Baton Rouge, LA 70816

e Sugar Bulletin
6 E. Bayou Rd.
ibodaux, La. 70301

BULK RATE
U.S. POSTAGE
PAID
PERMIT NO. 43
Thibodaux, La.

SERIALS DEPT.
LOUISIANA STATE UNIV
LIBRARY
BATON ROUGE LA 70803

The Sugar Bulletin

OFFICIAL BULLETIN OF THE AMERICAN SUGAR CANE LEAGUE OF THE U.S.A.

HOWARD ROBICHAUX
King Sucrose L

We stand for the encouragement of Home Industries as against Foreign Competition

Vol. 69 — No. 12

SEPTEMBER 1, 1991

The Sugar Bulletin

The Official Organ of the American Sugar Cane League of the U.S.A., Inc.

P. J. deGravelles, Jr., Editor and General Manager
Charles A. Richard, Ph.D., Director of Research and Field Representative
Windell R. Jackson, Senior Agronomist
Herman Waguespack, Jr., Agronomist
John Constant, Business Manager
Nannette B. Nickens, Office Secretary
Paul G. Borron, III, Legal Counsel

Washington Representative:
Wallace and Edwards, Inc.
1150 Connecticut Avenue, N.W.
Suite 507
Washington, D.C. 20036
Phone: (202) 331-4331

Baton Rouge Representative:
Spradley and Spradley
6216 Riverbend Boulevard
Baton Rouge, LA 70820
Phone: (504) 766-1359

Editorial and Executive Office:
206 E. Bayou Rd., Thibodaux, LA. 70301
Phone: (504) 448-3707

OFFICERS AND MEMBERS OF THE BOARD OF DIRECTORS OF THE AMERICAN SUGAR CANE LEAGUE

Daniel Viator, Ph.D, Youngsville, LA
President

Branan Beyt, Jeanerette, LA
1st Vice-President

P. J. "Pete" deGravelles, Franklin, LA
Vice President — General Manager

Don Wallace, Washington, DC
Vice President — Government Relations

Patrick Cancienne, Belle Rose, LA
Treasurer

Irving Legendre, Jr., Thibodaux, LA
Secretary

Manuel Acosta, Raceland, LA
Bryan Allain, Jeanerette, LA
J. G. Beaud, Jr., New Roads, LA
Ramon E. Billeaud, New Orleans, LA
Felix Blanchard, New Iberia, LA
Ronald Blanchard, Napoleonville, LA
Neal Bolton, St. James, LA
Lawrence Dugas, New Iberia, LA
Dan Duplantis, Raceland, LA
John F. Gay, Plaquemine, LA
Ronald Gonsoulin, New Iberia, LA
Mike Graugnard, Edgard, LA
Warren Harang, III, Donaldsonville, LA
Roddy Hulett, St. Martinville, LA
Bobby Judice, Franklin, LA
Roger Kahao, Port Allen, LA
Denis Lanaux, Killona, LA
Melvin Landry, New Iberia, LA
A. J. LeBourgeois, Baldwin, LA
D. C. Mattingly, Paincourtville, LA
Jerry McKee, Thibodaux, LA
William S. Patout III, Jeanerette, LA
Kenneth Peltier, Thibodaux, LA
Stanley Pipes, Franklin, LA
R. L. Roane, Jeanerette, LA
Howard Robichaux, Labadieville, LA
Raphael Rodriguez, Franklin, LA
Mel Schudmak, White Castle, LA
Frank Sotile, Donaldsonville, LA
David Stewart, Lakeland, LA
Roland Talbot, Thibodaux, LA
Jackie Theriot, Breaux Bridge, LA
Charles Thibaut, Donaldsonville, LA
Glenn Timmons, Brusly, LA
Carlton Townsend, Bunkie, LA
Eugene Woods, Paincourtville, LA

Best Values in New Equipment

After three years, nothing matches the MAGNUM warranty.

Five years or 5,000 hours. That's the coverage you get—at no extra charge—on every new MAGNUM™ tractor. In fact, it's the same warranty* that covers every MAGNUM tractor ever built.

And, while the competition offers an occasional free warranty, they haven't put it on every tractor. Besides, only MAGNUM's 5-year/5000-hour warranty can be fully transferred without a fee. That gives the MAGNUM tractor's already high resale value another boost. And it gives you another good reason to buy.

See us today about an on-farm demonstration. Once you work one, you'll understand why MAGNUM means more than ever.

*Excluding tires, which are covered by their own manufacturers' warranties. A $200 deductible applies to each repair after the first year.

© 1991 J I Case

See These Case IH Dealers

Switzer Sales and Service
Jeanerette, LA
(318) 276-6384

Gremillion's, Inc.
New Roads, LA
(504) 638-6347

Lanier Int'l. Inc.
Abbeville, LA
(318) 893-1988

Lemann's Farm Supply Inc.
Baton Rouge, LA
(504) 357-6453

Thibodaux, LA
(504) 447-3776

Donaldsonville, LA
(504) 473-7927

case IH

HOWARD ROBICHAUX KING SUCROSE L

The Louisiana Sugar Cane Festival and Fair Association announced in New Iberia, Louisiana on Saturday, August 3, 1991 that Howard Robichaux of Labadieville, Louisiana has been selected to serve as King Sucrose L. The annual festival, which celebrates its 50th anniversary this year, highlights the presence and importance of the sugar industry in Louisiana will be held in New Iberia, September 26th through September 29th, just prior to the commencement of the sugarcane harvest.

Mr. Robichaux, a resident of Labadieville, graduated from St. Stanislaus Catholic High School in Bay St. Louis, Mississippi, and graduated with a B.S. Degree in Agronomy from Nicholls State University in Thibodaux. From there he worked as an agronomist with the American Sugar Cane League for eight years. Mr. Robichaux currently serves as General Manager of the E.G. Robichaux Company in Labadieville, a position he has held since 1977, and he is also the president of Robichaux Farms, Inc.

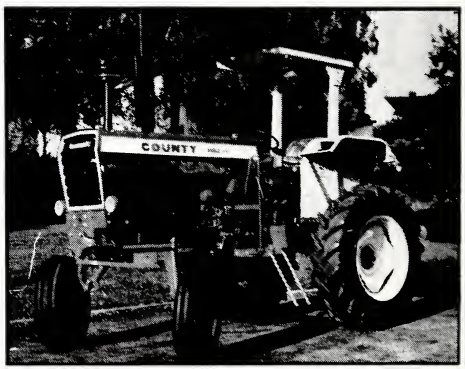
Mr. Robichaux presently serves on the Board of Directors of the American Sugar Cane League, the Board of Directors of the Glenwood Sugar Cooperative, Inc. in Napoleonville, and is a member of the Board of the Bayou Lafourche Fresh Water District in Thibodaux.

King Sucrose is married to the former Nancy Carmouche. They have two sons and five daughters.

The American Sugar Cane League congratulates Howard Robichaux for being selected as King Sucrose L.

MODEL 1162-H FORD COUNTY

HIGH CLEARANCE
6 CYLINDER DIESEL ENGINE
127 HORSE POWER
11.00 X 16 FRONT TIRES
20.8 X 38 R.I. REAR TIRES
9600 LB LIFT CAPACITY
DELUXE SEAT • ROLL BAR
35 INCH CROP CLEARANCE
GEAR TYPE DROP HOUSINGS



PRICED TO SELL
OUT OF TOWN CALL TOLL FREE

1-800-969-0068

Ford
FORD
NEW HOLLAND

M & L INDUSTRIES INC.

1210 ST. CHARLES ST.	HOUMA, LOUISIANA 70360	504/876-2280
3811 HWY. 90 EAST	BROUSSARD, LOUISIANA 70518	318/837-2763
5810 AIRLINE HWY.	BATON ROUGE, LOUISIANA 70805	504/355-7716

WASHINGTON UPDATE WITH DON WALLACE

HOUSE APPROVES TECHNICAL CORRECTIONS BILL TO 1990 FARM ACT

On Tuesday, July 30, 1991, the U.S. House of Representatives passed the Technical Corrections Bill to the 1990 Farm Act (H.R. 3029) by a vote of 417-5. This bill favorably addresses several issues of concern to the U.S. Domestic Sugar Industry.

The bill now requires the Secretary of Agriculture to annually publish in the Federal Register the basic loan rates for both cane sugar and beet sugar. Marketing assessments shall be collected during the marketing year on a monthly basis and shall be remitted to the Commodity Credit Corporation within 30 days after the end of each month of the marketing year. The assessment is .18 cents per pound of raw cane sugar (18 cents per cwt) and .193 cents per pound of beet sugar (19.3 cents per cwt). These assessments are to be collected on the amount of sugar actually marketed each month.

On July 18, Don Wallace, Pete deGravelles, Paul Borron and Mike Graugnard met with Keith D. Bjerke, Administrator of ASCS and Executive Vice President of the Commodity Credit Corporation. The outcome of this meeting resulted in a more equitable approach to sugar loan regulations and lien provisions. USDA agreed to support an amendment to the technical correction bill stating that any security interests obtained by the CCC would be granted superiority over any and all statutory and common law leins on raw cane sugar and refined beet sugar in favor of the producers of sugarcane and sugar beets and any and all prior recorded and unrecorded liens on the crops of sugar cane and sugar beets from which the sugar was derived. The amendment was subsequently adopted by the Agriculture Committee.

Another portion of the bill reflects a change in the method of estimating and forecasting annual domestic sugar consumption. The Secretary is now directed to deduct a reasonable amount of carryover stocks from the final estimate of annual sugar consumption. Also, supplementary nonrecourse loans to producers of cane sugar harvested in the last three months of the fiscal year will now be made available. This extension of the three-month quota period will result in a delayed announcement of the 1991/92 minimum duty import quota from September 15 to December 15, 1991.

USDA REPORTS COSTS OF PRODUCTION — MAJOR FIELD CROPS

USDA has updated its report on what it costs to produce the major crops. The two most costly crops to grow in 1989 — in terms of cash expenses per acre planted — were sugar cane and sugar beets. Peanuts, rice and cotton placed third, fourth and fifth, respectively. The 1989 figures were estimated by the Economic Research Service in its recent publication, "Costs of Production — Major Field Crops, 1989." Sugar cane, sugar beets and peanuts had the highest fixed and variable expenses per planted acre as well as the highest total cash expenses.

US SUGAR PRODUCTION vs WORLD'S TOP 10 PRODUCERS

A recent USDA study shows that U.S. Sugar Production has not changed much since 1975, while the other 9

(Continued on page 15)

FARM NOTES By Dr. Charley Richard

RECORD-KEEPING — CROP PREDICTION
POLADO LABEL — GUTHION USAGE CANCELLED

Each year I devote a small portion of one article to the concept of good record keeping by sugarcane growers. It has reached the point where it is now necessary to spend more than a few lines and instead devote a larger amount of this bulletin space to emphasize this important practice. Good business practices, like record-keeping, are things that many sugarcane growers tend to put as low priority in their day to day farming activities. In today's competitive business world, where every penny of expense can mean the difference between success and failure, it is extremely important that growers, as businessmen, make every attempt to keep as accurate a record of their operation as possible. Record keeping involves numerous practices.

Many of the varieties now being grown look very much alike. Good planting maps are essential to keep them separated and to be able to identify seed for next year's planting. Two of the varieties (CP 72-370 and LCP 82-89) are susceptible to some herbicides and it is important that you have good records of where these are planted so that proper care may be taken when applying these chemicals. At least three varieties, CP 76-331, CP 74-383 and CP 72-356 are susceptible to sugarcane borers and cannot be planted where airplanes cannot fly or where insecticides cannot be applied. If for no other reason than these it is important to keep good planting maps. However, for good borer control, for proper use of Polado, for following a proper harvesting schedule, for good rotational practices and for many other reasons it is important that good variety maps be made at planting time before you forget where each variety is planted.

In addition to planting maps, as part of the new Farm Bill record keeping requirements, information with regard to chemical application, both insecticides and herbicides, will need to be recorded. This kind of information needs to be recorded daily if an accurate record is to be kept. Proper acreage records not only for chemical spraying but also for seed usage and for total acreage are extremely important. This year there was a large discrepancy between the acreage reported by the Louisiana Agricultural Statistical Service and that reported by ASCS. The proper figures are those reported by ASCS and will show some 340,000 acres in sugarcane during 1991. However, the LASS reported to the National Agricultural Statistics Service some 370,000 acres earlier in the year. This figure was calculated based upon a sample of growers. Obviously this industry needs to do a better job of keeping its own records if we are to avoid these kinds of problems in the future. However, we in the League cannot keep good records if you as farmers don't have the good records as individuals. For many reasons it is extremely important that you keep good records and keep them updated in a timely manner.

Because the margin of profit in the sugar business is small in many cases, it is important that you as a grower keep good accounting records. In the past many growers simply counted their change after all the bills were paid to see how much money was left. Those days are past and to compete in the future it will take good business sense and good records to insure that the money is there to provide for an efficient operation. We may not all like this change but never

(Continued on page 16)

DR. LEGENDRE APPOINTED RESEARCH LEADER

On July 24, 1991, Dr. Neil Rutger, Associate Director, Mid South Area, United States Department of Agriculture — Agricultural Research Service, Announced the appointment of Dr. Benjamin L. Legendre as Research Leader of the USDA — ARS Sugarcane Research Unit at Houma, Louisiana.

Dr. Legendre has 23 years of research experience in state and federal organization in the genetic improvement of sugarcane and selection of improved sugarcane varieties. His research has provided improved sugarcane germplasm, breeding lines, and varieties. He also has conducted research on plant growth regulators as chemical ripeners, on increased production efficiency, improved harvest management, and improved milling quality of sugarcane.

Dr. Legendre is Chairman of the Sugarcane Subcommittee of the Crop Registration Committee of the Crop Science of America, member of the Sugarcane Crop Advisory Committee, member of eight committees of the American Sugar Cane League of the USA, Inc., and Chairman-at-Large of the American Society of Sugarcane Technologists.

The American Sugar Cane League welcomes Dr. Legendre in his new assignment.

TO PLACE CLASSIFIED ADS IN THE SUGAR BULLETIN CALL: (504) 448-3707

ENGINES
Gasoline • Diesel • Natural Gas
Watercooled • Air Cooled

GENERATOR SETS
3-1000 KW
Aircooled • Watercooled

PUMPS
Irrigation • Drainage • Volume
Trash • Sump • Submersible

Lo-lift Propeller

Ford Power Products

Diesel Transloader Engine

M & L ENGINE CO.
A Division Of M & L INDUSTRIES

		1-800-969-0068
1210 ST. CHARLES ST.	HOUMA, LOUISIANA 70360	504/876-2280
3811 HWY. 90 EAST	BROUSSARD, LOUISIANA 70518	318/837-2763
5810 AIRLINE HWY.	BATON ROUGE, LOUISIANA 70805	504/355-7716

The Baton Rouge Line

By Tom and Linda Spradley

While the 1991 Regular Legislative Session was a tough and arduous one for all concerned, the sugar industry emerged unscathed and, in fact, better off for some of the legislation that passed.

This past session was difficult for several reasons. First of all, the regular session was immediately preceded by two special sessions that ran back to back. The effect of this was that the regular session seemed much longer than usual which, in essence, was the case. Once again, the legislature faced many agonizing decisions over challenging issues, not the least of which was reapportionment. While the legislators dealt with this issue in the Second Special session, it hung over their heads during the Regular Session as they waited for the U.S. Justice Department to accept or reject the plan.

In spite of all this, sugar had a very good session. On the environmental front, it appeared that many legislators had heard the hue and cry from their constituents to rein in the powers of the Department of Environmental Quality (DEQ), and they reacted accordingly. As a result, sugar, agriculture, business, and industry were able to successfully negotiate a compromise on the "air toxics" legislation, SB 875 (Crain), arriving at an additional two years for meeting the reduction requirements of the air program, requiring DEQ to assist businesses with less than 1000 employees affected by the air program, and removing ammonia from the requirements of the air program.

Two key pieces of legislation that passed were a bill by Rep. Jimmy Martin (HB 968) and a resolution by Rep. John Travis (HCR 282) that effectively parallel the Executive Order signed by Gov. Roemer which directs the Chancellor of LSU's Agricultural College to review environmental regulations and submit a report accordingly as to the "worthiness" of the proposed regulations prior to implementation. These measures should bring some balance to some of the actions that have been taken by DEQ in regards to agriculture.

Additionally, the legislature passed a bill that will help sugar with the financial burden of meeting environmental requirements. HB 1242 (Laborde) will provide sales and use tax exemptions for pollution control systems.

Several other pieces of environmental legislation passed that should result in a more equitable situation for sugar.

In the arena of Worker's Compensation, two of sugar's floor leaders, Rep. Charlie Melancon and Sen. Mike Foster, led the charge for major revisions in worker's comp that should provide some relief in this area in the near future. The legislation, however, includes a constitutional amendment and enabling legislation. The former must be approved by the voters when they go to the polls on October 19, 1991. Following this article is further detail on this legislation.

Additionally, Rep. Al Ater passed a bill dealing with the seasonal aspect of worker's comp, allowing the amount paid to be based on year long earnings instead of the short period of time they are employed when sugar is harvested and milled.

We also made some progress in liability matters through killing a

(Continued on page 19)

IN THE FACTORY

Stephen J. Clarke
Audubon Sugar Institute
Louisiana Agricultural Experiment Station

UNUSUAL USES FOR SUGAR

Most of the time in this column I write about various aspects of the processing of cane to produce raw sugar and, for a change of pace, this month I will deal with some of the more unusual uses, real and unreal, for sugar. There has, of course, been much study into the use of sugar, especially as a chemical feedstock, but this is not the subject here. Sugar has been used or suggested for use in several ways, some important and beneficial and some verging on the absurd.

A use for sugar that many are not aware of is in the treatment of wounds and the prevention of infection. I first heard about this in Jamaica from a doctor who had been involved in the Biafran civil war in Nigeria. Medical treatment for gunshot wounds and burns was often not available and crystalline sucrose was poured into the injury which was then wrapped. This procedure minimizes infection, promotes healing, causes minimal discomfort and often reduces scarring. The sugar is easily removed once proper treatment becomes available. There have been few references to this treatment in the literature, but we in the industry should recognize this as yet another proof of the goodness of sugar.

A dilute solution of raw sugar with a little salt has been found to be very effective in counteracting the dehydration caused by certain, usually tropical, diseases. The lives of many children has been saved in this way but it has only recently become widely used.

Sugar is used in many cosmetic products and a patent has been issued for a hair-removing material based on sugar. A copy of this patent was given to me by Bill Keenliside, out of jealousy I think.

One of the interesting aspects of working at ASI is that we get many unusual calls about sugar from all over the country. Perhaps the weirdest that I have had was from a company that was planning to pump pulverized coal from Wyoming to Texas. One of the problems with this is the tendency of the coal to settle in the pipe. Their idea was that if they used a liquid of higher specific gravity the settling would be less of a problem and they thought of using a sugar solution. It could be recycled, is easily washed off the coal and does not contain any toxic material. Assuming that the material in the pipeline was fifty percent liquid, a sugar solution at fifty brix, and neglecting all the technical problems, a pipeline two feet in diameter and one thousand miles long would require about one hundred and fifty thousand tons of sugar, at a cost of sixty million dollars.

When I had been at ASI for only a little while, I gave a talk to some chemical engineers on the structures of simple sugars such as glucose and sucrose. I mentioned that glucose is the most common simple sugar since it has a special arrangement of the atoms within the molecule. It is very cheap compared with other isomers (same

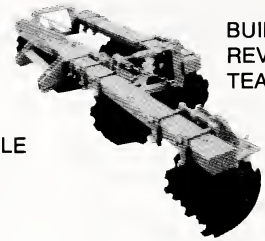
(Continued on page 21)

8319
CANE CULTIVATOR

ADJUSTABLE
ROW SPACING

GANG TILT AND
ANGLE ADJUSTABLE

BLADE
SCRAPERS

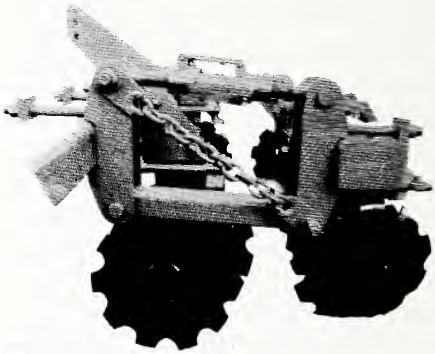


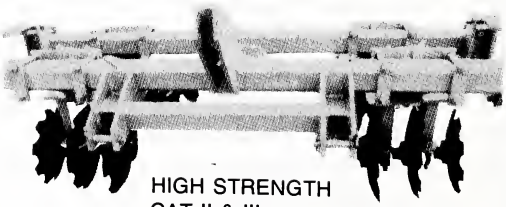
BUILD THE ROWS OR
REVERSE THE GANGS AND
TEAR DOWN THE ROWS

5 X 7 HIGH STRENGTH
FRONT AND REAR
TOOL BAR

1 1/2" SQUARE GANG BOLT
WITH 20 - 22 - 24 BLADE
EACH GANG

DOUBLE TAPERED ROLLER BEARING
WITH TRIPLE LIP SEALS





HIGH STRENGTH
CAT II & III
3 POINT HITCH

FLOATING REAR TOOL BAR
WITH HEAVY TURNBUCKLE
ADJUSTMENT TO LEVEL

HEAVY CLAMP
BOLTS AND
PLATES

PRIME MANUFACTURING CO., INC.
P.O. BOX 433, POPLARVILLE, MS 39470
(601) 795-4552

SWITZER'S SALES & SERVICE, INC.
JEANERETTE, LA 70544
(318) 276-6384

GREMILLION BROTHERS, INC.
COTTONPORT, LA 71327
(318) 876-3366

DIXIE TRACTOR CO.
OPELOUSAS, LA 70570
(318) 942-5689

SPECIFICATIONS AND PRICES SUBJECT TO CHANGE WITHOUT NOTICE

PRIME

PIQUA SINCE 1932

Chattanooga TENN SINCE 1871

Ph#(601) 795-4553

1991 SUGARCANE RIPENER RECOMMENDATIONS

Two formulations of the sugarcane ripener glyphosate may be available for use in Louisiana in 1991. The water soluble powder (POLADO) will be marketed first until inventories have been depleted. Thereafter, the newer liquid formulation (POLADO-L) will be made available. When using either product, remember that it is a violation of Federal law to use these products in any manner inconsistent with the labeling. Therefore, before using, read the entire label, and in the case of POLADO, read both the label and supplemental label. Both formulations can be applied to all ratoon crops and can be applied in five or more gallons of water per acre. *Please note that neither formulation is labeled for use on plant cane.* Growers considering the use of either formulation should also read the following recommendations for best response.

1. RATE: Although the label states that more product can be used, it is recommended that the following rates be considered.
   A. Apply POLADO (water soluble powder) at 0.5 pounds of the formulated product per acre.
   B. Apply POLADO-L (liquid formulation) at eight ounces per acre. (Under no circumstances should more than 10 ounces be used on first-stubble cane or cane that you intend to keep another year.)
2. VARIETAL RESPONSE: The response noted in the following table was derived from past performance in small plot and/or field experiments. The response of LCP 82-89 is unknown at this time.

Good	Moderate	Poor
CP 65-357	CP 74-383	CP 72-356
CP 70-321		
CP 72-370		
CP 76-331		
CP 79-318		

3. TREATMENT — HARVEST INTERVAL: Please note that the label states that all cane should be harvested within five weeks of treatment.

Days	Varieties
21-28	CP 72-370, CP 76-331
28-35	CP 65-357, CP 72-356, CP 74-383, CP 79-318
35	CP 70-321

* Harvesting of all varieties beyond 35 days may result in a loss of sugar per acre due to a loss of cane tonnage. Polado and Polado-L have been shown to reduce cane height.

Made available by Dalton P. Landry from recommendations prepared by Dr. Benjamin L. Legendre, Research Leader, Sugarcane Research Unit, Agricultural Research Service, U.S. Department of Agriculture, Houma, Louisiana.

4. ECONOMIC RESPONSE: Consider economic response based on projected cane yield using the following stalk populations anticipated per acre (assuming a two pound stalk):

Population (Thousands) Per Acre	Stalk No. Per Foot of Row	Response Sugar/Acre
Less than 15	2.0	Questionable
15-25	2.6	Toss up
More than 25	3.3	Probable

5. No additional surfactant is permitted when using POLADO; however, the use of a surfactant with POLADO-L is optional; consider its use only when rainfall is threatening. The effectiveness of both formulations may be reduced if rainfall occurs within six hours of application.

(Continued on page 22)

Women Chefs Dominate Winners' Circle at Chef's Sugar Secrets Contest

Although male chefs traditionally have garnered top culinary honors, the results of a recent competition reflect the rise of women in the ranks of American chefs during the past decade. Four of six top prizes, including the Grand Prize, were awarded to women at the 1991 Chef's Sugar Secrets Contest.

Sponsored by The Sugar Association, the Chef's Sugar Secrets Contest drew entries from more than 70 restaurant-affiliated chefs invited to compete through *Food Arts* magazine. The competition was designed to identify chefs who have found innovative methods of enhancing food flavors through the use of sugar and who demonstrated in their recipes the varied functional roles sugar plays in food preparation.

Grand Prize winner Elka Gilmore of Woodside, California was recognized for her recipe for *Seared California Farm Raised Striped Bass with a confit of Shallots and Garlic and Caramelized Leeks.* As Executive Chef for The Village Pub, a landmark California restaurant in the San Francisco Bay area, Gilmore finds sugar to be an indispensable ingredient in creating a balanced flavor in foods. Her striped bass recipe is a particularly good representation of sugar's myriad uses in food. Of its role in this recipe, Gilmore commented, "Sugar is vital to the caramelization of the leeks and in creating the crispy skin of the striped bass. It is also important as a traditional ingredient in the confit."

The prize-winning dish was designed as part of the winemakers' dinner where a vertical tasting of fine older Chardonnays took place. Gilmore reflected on the combination, "The dish, with its slight sweetness, proved a perfect complement to the heavier, fruitier flavor of the wine. Every element in the dish has a small amount of sugar, yet none of them are sweet."

As a woman in a traditionally male profession, Gilmore welcomes recent changes in attitudes toward women in fine kitchens. In a 1989 *Time* magazine article, "When Women Man the Stockpots," writer Mimi Sheraton noted, "To suggest a women as chef even ten years ago would have prompted laughter."

Today, however, most culinary schools report that almost half of their students are women. But Gilmore notes although women have "come of age" in the profession, many female graduates still have difficulty finding a first job.

Although it is unusual that women took the majority of the awards, the other gender was represented by Chefs Mark Ellman and Robert Jones who claimed honors as category winners. The complete list of category winners, their restaurants and winning dishes includes:

Grand Winner:

Chef Elka Gilmore, The Village Pub, Woodside, California, *Seared California Farm Raised Striped Bass with a Confit of Shallots and Garlic and Caramelized Leeks.*

First Courses:

Chef Daniele Kay, Citibank Executive Dining, Citibank Headquarters, New York, New York, *Gravlox.*

Chef Mark Ellman, Avalon Restaurant and Bar, Lahaina, Maui, Hawaii, *Shrimp and Green Papaya Salad.*

(Continued on page 13)

Sauces:

Chef Robert Jones, Vincent Guerithault on Camelback, Phoenix, Arizona, *Apple and Chipotle Chutney.*

Main Dishes:

Chef Tracy Pikhart Ritter, Golden Door, Escondido, California, *Grilled Chicken with Dipping Sauce and Sugar and Spice Pineapple.*

Breads:

Chef Rosemary Campiformio, St. Orres, Gualala, California, *Caramelized Onion Bread.*

The panel of judges critiquing the recipes included: Ariane and Michael Batterberry, *Food Arts* magazine; Nancy Kirby Harris, Past President of the International Association of Culinary Professionals; Jerry Di Vecchio, *Sunset Magazine;* Rozanne Gold Whiteman, The Rainbow Room; and Chef Wayne Nish of March restaurant. The group gathered at host Wayne Nish's March restaurant in New York City to taste and judge the competing recipes.

As Grand Prize winner, Elka Gilmore will travel to Jackson Hole, Wyoming in September 1991 for The Sugar Association Board meeting. Gilmore will be honored for her superior creation at a ceremony where winning recipes in the Chef's Sugar Secrets Contest will be served.

Tell Them You Saw It In
THE SUGAR BULLETIN

ASA
AMERICAN SUGAR ALLIANCE

ARE YOU A MEMBER OF THE AMERICAN SUGAR ALLIANCE?

The American Sugar Alliance is a national coalition of citizens dedicated to supporting domestic sweetener industry. It encompasses beet, cane and corn farmers who produce sugar and corn for sweetener — and also includes thousands of other Americans who work in sugar production and processing as well as in other related industries. We're working hard to assure that farmers and workers in the U.S. sweetener industry service in a world of heavily subsidized sugar.

Join us, won't you? Write or call for information on our individual or corporate memberships.

(202) 457-1437
1225 EYE ST. N.W., Washington, DC 20005

CLASSIFIED

FOR SALE: 1988 Cameco 2-row Harvestor John Deere engine, factory cab and air, 791 hours split system. Call (318) 364-8903 day, (318) 365-5036 night.

FOR SALE: J & L S-18 modified to an all hydraulic S-30 style harvester: Completely repaired and field ready. Call Ronald R. Hebert, Inc. (318) 276-9598 before 5 p.m. or (318) 276-4821 after 5 p.m.

FOR SALE: DICO HYDRAULIC TRANSLOADER on 40' Tandem axle trailer. Four hydraulic outriggers that fold up for transport. Located at 2118 N. 4th St., Baton Rouge. Phone (504) 383-1744.

CANE TRACTOR PARTS

We ship & locate parts nationwide.

New, Used and Rebuilt Hi Crop and Row Crop Tractor Parts. Tires. Rebuilt Clutches, Crank Shafts. Injector Pumps and More. Also Any Hard-To-Find Parts. We Buy Farm Equipment & Salvage Tractors.

SAVE 50% & More!

CANE TRACTOR PARTS

Toll Free 1-800-738-2263 **Hwy. 90**

(318) 276-3453 **(318) 276-6230** **Jeanerette, LA**

countries among the world's top 10 producers have boosted their output substantially. Below is a breakdown on the output of the 10 countries that produce 70% of the world's supply of sugar:

Year	EC-12	India	USSR	Brazil	Cuba	China	US	Thai.	Anst.	Mexico
1975/76	12.02	5.61	8.09	6.18	6.28	2.31	6.48	1.64	2.99	2.70
1980/81	14.70	6.54	7.17	8.55	7.54	3.22	5.51	1.68	3.33	2.52
1985/86	15.30	7.98	8.26	8.27	7.20	5.54	5.47	2.59	3.40	3.93
1990/91	17.00	12.92	9.16	7.90	7.80	6.60	6.35	3.90	3.52	3.40

HOUSE PASSES DISASTER BILL

By a vote of 328-67, the House passed H.R. 2893, the Agriculture Assistance Act of 1991. This legislation would provide disaster assistance to eligible producers of all 1990 or 1991 crops (at the producer's option) prevented from planting or experiencing reduced yields due to damaging weather conditions. The Senate Committee on Agriculture will consider this bill after Labor Day.

AMERICAN SUGAR ALLIANCE SWEETENER SYMPOSIUM

The 8th Annual International Sweetener Symposium took place August 11-14 at Keystone Resort, Colorado, with over 300 people in attendance. The theme "Domestic Sugar Policies/International Politics" permeated addresses, panel discussions and debates. The main thrust of the program was to breach the current impasse between these two elements and create a formula to assure the continued success of the domestic sweetener industry.

Authorities such as Gillian Lavers of England's Landell Mills presented a study outlining the strong, competitive position of U.S. sugar producers in relation to producers in the EC and Japan. Craig Thorn of the USDA's FAS participated in the panel discussion entitled "Agriculture in the Uruguay Round." Discussions centering on GATT and the North American Free Trade Agreement emphasized a level playing field, requiring foreign internal support levels to be lowered to a standard equitable to that of the U.S. before the U.S. lowers its supports. Don Wallace was elected the new 1991-1992 Chairman of the American Sugar Alliance.

Take Stock

In America

BUY

U.S.

SAVINGS

BONDS

 (Continued from page 6)

the less this is the way it is and we should all get used to it. Being a good "dirt farmer" won't be good enough any more. Good business practices are now essential to make you a "complete farmer".

Some growers have turned to computers to help them keep records. This isn't necessary but it may help many of you to keep better records. If you have an interest in keeping better records but are afraid of computers, the League has and will continue to offer a Computer Users Group to help those individuals just getting started with computers and also advanced classes for those who want to better their skills. However, even if you don't want to get into computers, a good daily diary of your field activities is essential to make sure that you will have the kinds of records needed to stay in business. Remember good record-keeping is simply a matter of consistently recording what you have done. I realize that this takes time away from what may appear to be more productive work, but you really don't have a choice. **Good record keeping is essential!**

CROP PREDICTION

Earlier this year most growers had figured on a very good crop especially with the large amount of plant cane on many farms. However, spring and early summer rains dampened the prospects for a bumper crop and now many feel that the crop as a whole is only slightly above average. Based upon the best predictions of League Agronomists and others who see the state crop, it is felt that we might average about 28 gross tons of cane per acre. There should be some 315,000 acres harvested for sugar and if the industry could average 185 pounds of sugar per ton of cane then the Louisiana industry could still produce more than 800,000 tons of sugar. This would be a very good yield in spite of the poor weather experienced earlier this year. At this time there are still many things that can reduce this expectation but it is hoped that the weather will cooperate for a change and allow for a good conclusion so that growers can recover some of their losses following the 1989 freeze.

POLADO LABEL

Earlier this year Dr. Ben Legendre of the USDA-ARS in Houma, Dr. Freddie Martin of the Louisiana Agricultural Experiment Station and this author requested a supplemental label for Polado so that it could be used on plant cane rather than only stubble cane as the label currently states. All three of us felt that the chances were good to obtain the label change and that the product would be widely used because of the extensive acreage in plant cane following the 1989 freeze and the heavy planting of 1990. However, I have been notified by Mr. S.B. Halter, Manager, Southern Specialty Markets with Monsanto that "After conducting a risk/benefit analysis we have concluded that it is in all parties' best interest to not label Polado for use in plant sugarcane in 1991. Factors which impacted our decision were high potential for crop injury complaints and potential impact on varieties we have not tested."

In this letter to this author Mr. Halter also points out that "We proceeded to gather as many inputs as possible from customers, extension agents, and internal Monsanto personnel, in an effort to make the right

(Continued on page 17)

 (Continued from page 16)

decision for the marketplace." Mr. Halter concludes the letter with "We hope you can appreciate our position on this matter." This author realizes Monsanto's reasoning but feels that the industry will be hurt by this decision. Furthermore, this author questions which extension agents and customers gave inputs to Monsanto personnel. Available data collected by Drs. Legendre and Martin had indicated that plant cane applications of Polado had not significantly affected stubble yields. As a result of this decision, plant cane will have to be harvested in early October by some growers without the benefit of legal applications of a chemical ripener.

GUTHION USAGE CANCELLED

On August 12, 1991, a stop use order was issued by the Department of Agriculture for the insecticide azinphos methyl sold under trade names of Guthion, Sniper and Azinphos-methyl 2 EC. This order is effective through December 31, 1991 and was a result of the controversy which has occurred this summer throughout much of the cane belt surrounding the cause of numerous fish kills. This year has seen the heaviest infestations of sugarcane borer in many years. More insecticide has been used in 1991 than in any recent year. Also rainfall this year has been the highest in recorded history. A combination of these two factors has allowed this insecticide to be detected in streams in the cane belt. Some of the water quality samples have found azinphos methyl in small quantities in areas associated with the fish kills. However, oxygen

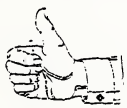
(Continued on page 18)

Farm Financing From Folks Who Understand.

Sometimes it's hard to explain — to someone who doesn't know your business — why you need money and how you plan to use it.

At First South Production Credit Association you won't have to educate our loan officers.

They understand farming and they'll tailor a financing package to fit your needs.

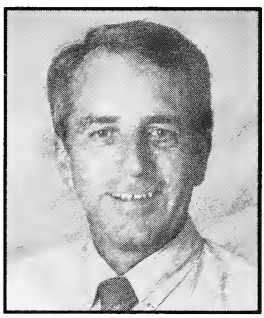


We'll help you buy that new tractor, get the crop in this year, make farm improvements or just keep the cash flow flowing.

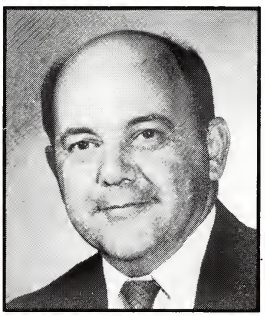
Because You Deserve It.

Give us a call.

First South
Production Credit Association



LESTER SIMON



HARVEY GONSOULIN

FARM NOTES *(Continued from page 17)*

levels in many of these waterways are traditionally low at this time of the year; particularly so this year with the drainage of swamp waters following the heavy rains earlier this year and the extremely warm temperatures experienced this summer. Algae blooms have been common in many waterways during the summer months this year. It is highly possible that the fish kills were a result of low oxygen and/or a combination of factors including the pesticide azinphos methyl. There has also been some problems where aerial applicators have not been as careful as they should have with regards to drift and flying over streams. Pilots and growers will need to work more closely to avoid spraying areas close to houses and near waterways.

As a result of the public concern for the fish kills, the Department of Agriculture and Forestry along with Mobay Corporation, Platte Chemical Company and Micro Flo Company have agreed on the stop use order. This leaves only Asana XL for use in sugarcane borer control for the remainder of 1991. It is felt that the industry will limp along for the remainder of the summer but will certainly feel the effects of not having azinphos methyl for the remainder of this heavy borer season. Using Asana has often times been associated with aphid buildups in the past. Should we be forced to use more Asana, growers may have to pay more attention to aphids and possible losses from this insect.

A special panel appointed by Commissioner Bob Odom is studying the data concerning the fish kills and will make a report as quickly as possible regarding what should be done. It is hoped that use of azinphos methyl will not be affected in future years since this insecticide has done an excellent job over the years and is relatively safe as compared to many other pesticides. Researchers are evaluating a new pyrethroid (Baythroid) which hopefully will receive a label later this year or at least for next year. Sugarcane borers will cause significant losses of sugar during 1991 for some growers even with the application of insecticides. Tests conducted in the belt indicate that susceptible varieties with no insecticides have virtually been destroyed. The importance of an integrated pest management system in cane and resistant varieties have been valuable in reducing insecticide usage. However, in years such as the current season, insecticide use will be greater and unfortunately problems have occurred. Hopefully future seasons will not be as severe.

Liquid Fertilizers
For Sugar Cane

NEW IBERIA, LA. (318) 367-8233

THE
SUGAR BULLETIN
(504) 448-3707

 (Continued from page 8)

couple of bad bills and passing a good bill. HB 303 (Holden) provided for solidary liability in the storage, handling, or transportation of toxic or hazardous substances. This bill, which has been filed for the last few years, never made it off the House floor.

SB 994 (Kelly) would have opened prescription for the abatement of lead paint. While this bill would not directly have affected sugar, the opening of prescription is an extremely dangerous step for business and, because it has been done before, this bill could have been the beginning of a trend, especially threatening to sugar in light of the various pesticides that are used throughout the industry. This bill was killed on the House floor.

Sen. Larry Bankston authored a third party mental anguish bill (SB 547) that, hopefully will limit liberal judicial rulings. The bill names those parties eligible to recover damages if they have viewed an event causing injury to another person, or who come upon the scene of the event thereafter. It also establishes the circumstances under which those eligible parties can recover.

Following are some of the key bills, briefly described, that we followed for sugar, and their final status. Please call us if you would like additional information about these or other bills from the recent legislative sessions.

SB 875 (Crain) — Extends by two years the deadline for meeting the 50 percent emissions reduction required by the air pollutant control program; requires DEQ to provide technical assistance to all affected sources and coordinate among similar sources the determination of maximum achievable control technology; requires DEQ to establish a stationary souce compliance assistance program for businesses with fewer than 100 employees; requires hearings be held in at least seven major metropolitan areas of Louisiana; requirements of this legislation as it related to ammonia fertilizer shall be no more stringent than existing federal requirements. Enrolled.

HB 1242 (Laborde) — Excludes the sales of pollution control devices or systems from the state sales and use tax. Because local government can be no more stringent than the state in its levy of taxes, this essentially eliminates local sales and use tax, in addition to that of the state. Enrolled.

HB 968 (Martin) — Establish liasion in Governor's office for DEQ and agriculture; Chancellor of the LSU Agricultural Center shall designate appropriate research on proposed rules and regulations affecting agriculture; provide documentation of same to liaison and DEQ; no rule or regulation may be adopted unless "justifies, practical, and worthy". Enrolled.

HCR 132 (Martin) — Provides that the regulation of agricultural crop residues and agricultural waste shall fall within the jurisdiction the Department of Agricultural and Forestry. This resolution directs DEQ to amend its proposed rules on solid waste accordingly. A resolution, however, does not have the effect of law and can only suspend law for a year. Therefore, this issue may need to be revisited.

HB 1887 (Lemoine) — Provides cause of action for producers of

(Continued on page 20)

 (Continued from page 19)

perishable agricultural food product if person provides false information that such food is not safe for consumption. Enrolled.

HB 301 (Landrieu) — Forces court records to be opened in cases of "public hazard"; public hazard was not defined, however. Vetoed by Governor.

HB 303 (Holden) — Would have reversed the joint and several liability compromise law of 1987 for cases involving handling, storage and transporation of hazardous materials. Died on House floor.

SB 994 (Kelly) — Would have reopened prescription on claims for lead paint abatement. Died on House floor.

SB 547 (Bankston) — Establishes which parties may recover damages and under what circumstances in cases involving third party mental anguish. Enrolled.

HB 502 (Ater) — Requires that a mental stress injury without physical injury be diagnosed by a licensed psychiatrist or psychologist. Enrolled.

HB 506 (Ater) — Reduces worker's compensation benefits when other benefits are being received. Enrolled.

HB 853 (Ater) — Changes the formula for seasonal employees' worker's compensation benefits to more closely reflect their annual wages. Enrolled.

SB 1062 and SB 1073 (Foster/Melancon) — These are the constitutional amendment and enabling legislation that create the Louisiana Worker's Compensation Corporation as a private, nonprofit corporation to provide worker's compensation insurance and residual market for Louisiana employers. To become law, the constitutional amendment must be approved by the people when it appears on the ballot on October 19, 1991.

HB 1210 (Melancon) — Would have provided for an increase in weight limits for sugar cane trucks. Died on House floor.

SB 286 (Brinkhaus) — Exempts farmers towing fertilizer and fuel tanks from Commercial Drivers License (CDL). The Federal Highway Administration has allowed states to waive the CDL requirement for farmers. Enrolled.

For efficiency & Accuracy in Precision grading Consider the purchase of a

Lazerplane
by
Spectra-Physics

- Shorten your completion time
- reduce manhours per project
- easy to operate
- Eliminates costly overcutting

contact

ALLEE, ALLEE & ALLEN, Agent
P.O. BOX 108
ST. JAMES, LA 70086
504/265-3965

IN THE FACTORY

(Continued from page 9)

number and type of atoms but different arrangements) which can cost as much as a quarter of a million dollars per pound (D-altrose as priced in a recent catalogue). Such materials are of only specialized scientific interest and are produced in small quantities. One of the senior chemical engineers present suggested that we put some sucrose in the catalytic cracker at Exxon which is used for structural modifications in hydrocarbons. The only result of this would be production of carbon.

Other sugar industry research groups also get similar requests and one recently heard about involved the testing of containers for use in transporting nuclear waste on the highway. Since the material packed in the drums would have the same bulk density as molasses, a test program was set up in which drums of molasses would be allowed to fall off the back of a truck to determine whether they could stand the shock. This sounds like a project a lot of people would enjoy.

As I write this, many in the industry are taking their last break before the crop begins. From all accounts the crop looks large but it may be unusual with the large amount of plant cane and the problem with borers. This copy of the Bulletin will probably be the last you receive before planting and harvesting begin and I want to take this opportunity to wish everyone well for the upcoming crop.

SUGAR BULLETIN
WANT ADS
GET RESULTS

GOODYEAR

SPECIAL
SURE-GRIP TD-8

GOODYEAR TIRES FOR YOUR CAR, TRUCK, FARM OR OFF HWY. EQUIPMENT

- 24 HR. ROAD SERVICE
- COMPLETE AUTOMOTIVE CERTIFIED SERVICE
- TRUCK TIRE BALANCE AND ALIGNMENT

NOBODY FITS YOU LIKE GOODYEAR

SUPER TRACTION • SUPER STRENGTH

GENERAL ELECTRIC AUTHORIZED DEALER

7:30 AM - 6:00 PM MON. - FRI.
7:30 AM - 1:00 PM SAT
1203 ST. PATRICK HWY
THIBODAUX

PIT STOP
YOUR ON FARM SERVICE SPECIALIST

GOODYEAR AUTO SERVICE CENTER
1-800-256-1269 (504) 447-2696

RIPENER RECOMMENDATIONS *(Continued from page 11)*

6. The use of a buffer solution is generally not recommended.
7. Use a flagger for uniform application whenever possible.
8. If cane is severely lodged, allow sufficient time (usually 5-7 days) for the cane to erect itself before making application with either formulation. Total canopy coverage is essential for best results.
9. Avoid spray drift to non-targeted fields and especially fields intended for use for seed purposes. Seed cane treated with glyphosate will not germinate or grow properly. Consider the use of a drift control agent where applicable.
10. Top treated cane properly. Topping above the last expanded internode (hard joint) will lessen overall response, cause processing difficulties and increase the likelihood of starch in the raw sugar. The presence of starch in the raw sugar could eventually lower the price paid by the refinery. Please note that POLADO or POLADO-L will not increase the level of dextran in the juice when used in accordance with the label.
11. Both POLADO and POLADO-L have been shown to improve field burning of leaves and other forms of trash.
12. Both POLADO and POLADO-L have been shown to improve the harvestability of lodged and/or brittle cane.
13. POLADO and POLADO-L area registered trademarks of Monsanto Company.

Introducing Ultra-Command ™ Powershift:

MODEL 8830 FORD TRACTOR

ULTRA-COMMAND POWERSHIFT
170 P.T.O. HORSEPOWER
FRONT WHEEL ASSIST
16.9 X 28 R1 FRONT TIRES
20.8 X 38 R1 REAR TIRES
22½ INCH CROP CLEARANCE
WHISPER QUIET CAB
3 YEAR WARRANTY • NO DEDUCTIBLE

There's never been a powershift like this!

Call or Stop In Today **1-800-969-0068**

Ford FORD NEW HOLLAND

M & L INDUSTRIES INC.

1210 ST. CHARLES ST.	HOUMA, LOUISIANA 70360	504/876-2280
3811 HWY. 90 EAST	BROUSSARD, LOUISIANA 70518	318/837-2763
5810 AIRLINE HWY.	BATON ROUGE, LOUISIANA 70805	504/355-7716

THE SUGAR BULLETIN

Mailing List Update

☐ Address change. Please attach top portion of front cover containing your name and address.

☐ I no longer wish to receive THE SUGAR BULLETIN. Please remove my name from your mailing list.

Name _____

Address _____

City _____

State _____ Zip _____

Mail to:

THE SUGAR BULLETIN
P.O. DRAWER 938
THIBODAUX, LA. 70302

For changes in present subscription, address imprint from front cover **must be attached.**

FOR THE
LATEST
INFORMATION
in the
SUGARCANE
INDUSTRY
and
FARM
PRODUCTS

READ
and
ADVERTISE
in

THE
SUGAR
BULLETIN

Commercial Members of the
AMERICAN SUGAR CANE LEAGUE
OF THE U.S.A., INC.

ASSUMPTION BANK & TRUST CO.
P.O. Box 398 Napoleonville, LA 70390

THE CROPMATE COMPANY
Fertilizer Region
P.O. Box 28 Thibodaux, LA 70302

CAMECO INDUSTRIES, INC.
P.O. Box 968 Thibodaux, LA 70302

FIRST COMMERCIAL BANK
521 Main St. Franklin, LA 70538

DUPLANTIER, HRAPMANN, HOGAN, & MAHER
Certified Public Accountants
821 Gravier Suite 1300
New Orleans, Louisiana 70112

ESTES REFRACTORY
P.O. Box 94 Jeanerette, LA 70544

LOUISIANA NATIONAL SECURITY BANK
P.O. BOX 108 420 Mississippi St.
Donaldsonville, LA 70346
12328 Hwy. 44 Gonzales, LA 70737

GULF ENGINEERS & CONSULTANTS, INC.
535 Main Street
Baton Rouge, LA 70802

WESTWAY TRADING CORP.
228 St. Charles Ave., Suite 700
New Orleans, LA 70130

NADLER, INC.
P.O. Box 359
Plaquemine, LA 70765

NATIONAL BANK
FOR COOPERATIVES
Jackson Region
1800E, County Line Road
P.O. Box 16099
Jackson, MS 39236

OUACHITA FERTILIZER
Route 7, Box 49-F
New Iberia, LA 70560

DRAVO LIME COMPANY
Pelican State Division
12797 Scenic Highway
Baton Rouge, LA 70807

SELF INSURANCE ADMINISTRATORS
P.O. Box 11509
New Iberia, LA 70562-1509
A Member Company of Huval Insurance Group

FIRST SOUTH PCA
P.O. Box 667 Thibodaux, LA 70302
P.O. Box 10908 New Iberia, LA 70562

STANDARD SUPPLY & HARDWARE CO., INC.
P.O. Box 60620 New Orleans, LA 70160

ST. MARY BANK & TRUST CO.
Franklin, LA 70538

LOUISIANA CANE MFG., INC.
P.O. Box 71 Thibodaux, LA 70301

WHITNEY NATIONAL BANK
228 St. Charles Avenue
New Orleans, LA 70130

3-D CHEMICAL, INC.
P.O. Box 607
St. Martinville, LA. 70582

J.I. CASE
P.O. Box 171818
Memphis, TN 38187-1818

M&L INDUSTRIES
1210 St. Charles St. Houma, LA 70360
3811 Hwy. 90 East Broussard, LA 70518
5810 Airline Hwy. Baton Rouge, LA 70805

BROUSSARD, BUSH & HURST, INC.
11764 Haymarket Dr.
Baton Rouge, LA 70816